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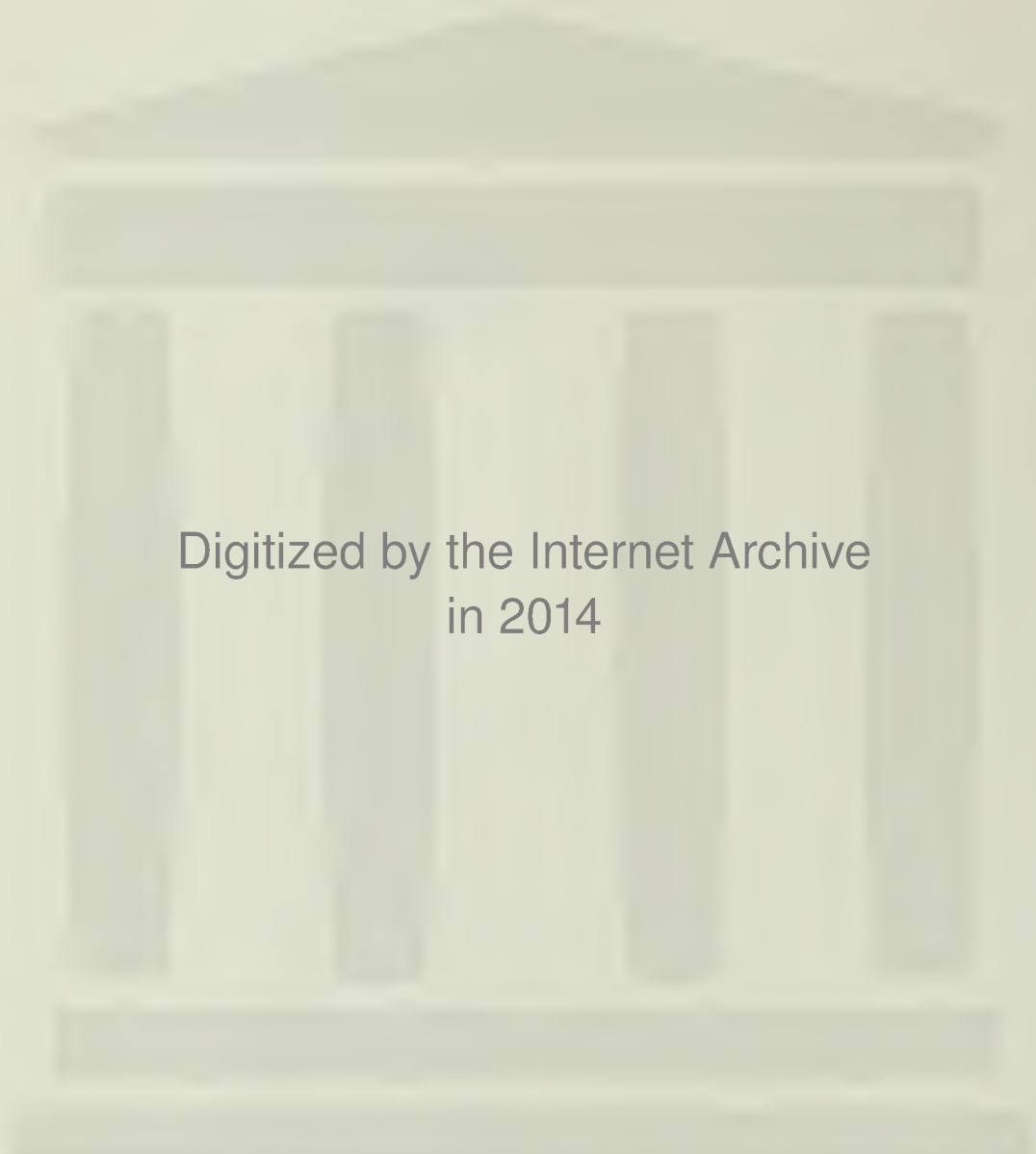

SAN FRANCISCO INDUSTRIAL TRENDS

DEPARTMENT OF CITY PLANNING · OCTOBER 1968

S A N F R A N C I S C O

I N D U S T R I A L T R E N D S

SAN FRANCISCO DEPARTMENT OF CITY PLANNING OCTOBER 1968

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INTRODUCTION

The purpose of this report is to provide background in the form of a single reference document for public agencies, private groups, and individuals concerned with formulating policies affecting the industrial base of San Francisco. The report brings together information on city and regional trends and on the strengths and weaknesses of San Francisco's industry. It will, therefore, enable the members of the City Planning Commission, in their advisory role of recommending development policy for the city, to have a better understanding of industrial trends. In addition, information of this nature will be of special importance to the staff of the Department of City Planning in revising the San Francisco Comprehensive Plan.

The term "industry" as used in this report includes manufacturing, warehousing and wholesale distribution, building and other trade contractors, salvage yards, transportation facilities, utilities and related activities.* It should be recognized, however, that a perfect definition of "industry" is difficult to achieve. For example, certain kinds of services have an industrial character and certain public utilities employ a large number of clerical and administrative people, not involved directly in production.

The report is divided into sections representing important factors in determining the status and trends in San Francisco industry: employment, location, the port, condition, firm migration, and vacant land and floor space. The information was derived from a wide selection of industrial studies and data available on a periodic basis. These materials are listed in a bibliography at the end of the report.

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*The applicable Standard Industrial Classification (S.I.C.) two-digit categories are 15 through 50.

SUMMARY

Employment

Between 1953 and 1966, industrial employment in the Bay Area increased by nearly 16 percent. Increases occurred in all industrial employment categories including contract construction, manufacturing, wholesale trade, transportation, communications, and other public utilities. The industrial category with the largest growth in the Bay Area was transportation, communications, and other public utilities: a 26 percent increase over the 13-year period. This decline occurred primarily in manufacturing and wholesale

ERRATA

The following sentence should be inserted halfway down the first paragraph, before the sentence beginning with "This decline occurred . . .":

> San Francisco, on the other hand, experienced a 7 percent decline in industrial employment.

Location

Leading industries in San Francisco appear to be concentrated in the South of Market District. In 1964, 41 percent of the employment in contract construction, food and kindred products (manufacturing), apparel manufacturing, printing and publishing, fabricated metal products and nonelectrical machinery manufacturing, and wholesale trade was located in the South of Market District. In 1964, this district had 47 percent of the floor space in these same industries. Only in the processing of food and kindred products, manufacturing of fabricated metal products and nonelectrical machinery was more than half the employment and floor space located outside the South of Market and Downtown Districts.

The Port

The high value of goods handled by the Port of San Francisco makes it one of the leading ports in the nation, even though it handles a relatively small proportion of the waterborne cargo passing through the Bay Area. Port activities in 1964 were directly and indirectly responsible for about 12 percent of the total employment in San Francisco. The Port of San Francisco is expected to grow in significance in future years. It is anticipated that between 1965 and 1990, the total tonnage handled through the Port will grow by 50 percent. San Francisco has already begun to build new port facilities to meet the requirements of technologically advanced methods of cargo handling. Additional specialized facilities, however, are needed to meet competition from the Port of Oakland.

Condition

In 1964 a survey was conducted on industrial and commercial properties in predominantly industrial areas of San Francisco. The survey indicated that 21,250,000 square feet, or 29 percent of the total amount of floor space, ranked first in condition. On the other hand, 7,057,000 square feet, or 10 percent of the total floor space, was placed in the lowest of the condition classifications. Industries in the South of Market area had three-quarters of all the floor space in the poorest condition, and half of all floor space in the best condition. Although more than 5,000 jobs were associated with firms in the poorest quality category, these jobs represented only about five percent of the total number of jobs surveyed in the predominantly industrial areas of the city. Buildings of poorer quality, nevertheless, do frequently serve the needs of firms, including new "incubator" firms, that seek inexpensive floor space.

Firm Migration

In sharp contrast to the Bay Area trend, the number of firms in San Francisco is decreasing in every major industrial category except transportation. In the remainder of the Bay Area the number of industrial firms in all classifications is increasing. Surveys recently undertaken indicate why some industrial firms have migrated to other areas while others have preferred to remain in the city. The results of these are as follows:

1. A survey by the Chamber of Commerce revealed that industrialists' dissatisfaction with their San Francisco location involved the cost of doing business in the city and in the inadequacy of their sites. On the positive side, their satisfaction was mainly with the adequacy of public utilities and municipal services. In a later survey by the Chamber, industrialists generally reaffirmed their satisfaction with San Francisco from the standpoint of access and services available to their sites.

2. A survey of firms that have left San Francisco, by Arthur D. Little, Inc., found that most firms had been located in or near downtown, had a market primarily outside the Bay Area, and expanded both their plant facilities and their employment at their new locations.

Several kinds of industries have remained strong in San Francisco during years of industrial decline and appear likely to retain their affinity for a central city location. These are: making and processing of foods

and beverages, apparel making, printing and publishing, wholesale trade, and a host of small firms that depend on the abundance of industrial services available in San Francisco.

Vacant Land and Floor Space

Land available for industrial expansion in San Francisco is rapidly diminishing. Although the 1961 - 1964 land-use survey conducted by the Department of City Planning found more than 400 acres of vacant land in industrial areas, a large portion of this land supply has been developed since the time of the survey. The greatest potential for industrial development is in the South Basin. In this area, vacant land, unimproved streets, and open storage yards add up to a considerable resource. Vacant industrial floor space appears to be concentrated primarily in the northeast portion of the city, north and south of Market Street.

EMPLOYMENT

The number of jobs that industry provides is one measurement of the importance of industry to the community. According to the United States Bureau of the Census, industrial employment* in the San Francisco-Oakland Standard Metropolitan Statistical Area (SMSA)** rose from 382,890 in 1953 to 443,163 in 1966--a 15.7 percent increase. San Francisco's industrial employment, on the other hand, dropped from 187,707 to 175,594--a 6½ percent decrease (see Table 1). Despite the loss of industrial jobs in San Francisco, estimates of the California Department of Employment showed industry still employed 35 percent of the 505,000 persons working in San Francisco in 1966. In the SMSA as a whole, 38 percent of the jobs were in industry.

San Francisco's employment in construction (including special trade contractors) remained fairly steady throughout this period and employment in transportation, communications, and other public utilities actually expanded. The big drops were in manufacturing and wholesale trade. The steady growth of employment in finance, insurance, services, and government, however, has more than offset the loss of jobs in manufacturing and wholesaling, so that the total number of jobs in San Francisco has continued to rise (see Table 3).

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*The Bureau of the Census statistical source, County Business Patterns, includes clerical, service, and administrative employees of industrial establishments as well as production workers. It excludes, however, railroad employees and self-employed persons.

**Includes the counties of San Francisco, Alameda, Contra Costa, Marin, and San Mateo.

TABLE I. INDUSTRIAL EMPLOYMENT IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA* -- 1953 and 1966

Industrial Category	San Francisco				SMSA				San Francisco as a % of the SMSA	
	1953	1966	Change	(%)	1953	1966	Change	(%)	1953	1966
ALL INDUSTRY	187,707	175,594	-12,113	(- 6.5)	382,890	443,163	+60,273	(+15.7)	49.0	39.6
Contract Construction	24,024	23,594	- 430	(- 1.8)	57,341	65,781	+ 8,440	(+14.7)	41.9	35.9
Manufacturing	69,479	59,873	- 9,606	(-13.8)	180,978	200,880	+19,902	(+11.0)	38.4	29.8
Transportation, Communications, and Other Public Utilities	44,955	49,309	+ 4,354	(+ 9.7)	77,480	97,515	+20,035	(+25.9)	58.0	50.6
Wholesale Trade	49,249	42,863	- 6,386	(-13.0)	67,091	78,987	+11,896	(+17.7)	73.4	54.3

* Includes the counties of San Francisco, Alameda, Contra Costa, Marin, and San Mateo

Source: U.S. Bureau of the Census, County Business Patterns.

TABLE 2. POPULATION IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA* - 1950 and 1966

	San Francisco	SMSA	San Francisco as a % of the SMSA
Population 1950	775,357	2,135,934	36.3
Population 1966**	743,100	3,000,800	24.2
Change, 1950-1966 (%)	- 32,257 (4.2%)	+ 864,866 (40.5%)	--

* Includes the counties of San Francisco, Alameda, Contra Costa, Marin, and San Mateo

** Estimate of the California Department of Finance.

Source: U.S. Census of Population: 1950; California Department of Finance.

TABLE 3. EMPLOYMENT IN ALL ACTIVITIES IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA* - 1958 and 1966

	San Francisco					SMSA					San Franci as a % of the SM	
	1958	% of Total	1966	% of Total	Change (%)	1958	% of Total	1966	% of Total	Change (%)	1958	196
TOTAL EMPLOYMENT	467,000	100.0	505,000	100.0	+38,000 (+ 8.1)	1,039,200	100.0	1,268,700	100.0	+229,500 (+22.1)	44.9	39.
Agriculture & Mineral Extraction	500	0.1	300	0.1	- 200 (-40.0)	14,300	1.4	11,600	0.9	- 2,700 (-18.9)	3.5	2.
Industry**	194,700	41.7	183,200	36.3	-11,500 (- 5.9)	448,000	43.1	483,900	38.1	+ 35,900 (+ 8.0)	43.5	37.
Retail Trade	62,700	13.4	62,900	12.5	+ 200 (+ 0.3)	155,600	15.0	189,200	14.9	+ 33,600 (+21.6)	40.3	33.
Finance, Insurance, & Real Estate	46,800	10.0	58,400	11.6	+11,600 (+24.8)	68,200	6.6	88,400	7.0	+ 20,200 (+29.6)	68.6	66.
Services	90,300	19.3	113,100	22.4	+22,800 (+25.2)	184,300	17.8	253,900	20.0	+ 69,100 (+37.4)	48.9	44.
Government	71,500	15.3	86,500	17.1	+15,000 (+21.0)	164,600	15.8	237,400	18.7	+ 72,800 (+44.2)	43.4	36.
All Other	500	0.1	600	0.1	+ 100 (+20.0)	3,700	0.4	4,300	0.3	+ 600 (+16.2)	13.5	14.

* Includes the counties of San Francisco Alameda, Contra Costa, Marin, and San Mateo.

** Includes contract construction; manufacturing; transportation, communications, and other public utilities; and wholesale trade. Employment totals for 1966 in Tables 1 and 3 are taken from different sources and do not agree.

Source: California Department of Employment, Coastal Area Office.

Despite losses in industrial employment, San Francisco in 1966 still had 175,594 jobs in industry. This was 40 percent of the 443,163 industrial jobs in the SMSA. As shown in Table 1, San Francisco had 36 percent of all jobs in contract construction; 30 percent in manufacturing; 51 percent in transportation, communications, and other public utilities;* and 54 percent in wholesale trade.

Manufacturing

Manufacturing employment, which has been steadily declining over the years, accounted for one out of every three jobs in industry in 1966. San Francisco's net loss of jobs in manufacturing between 1953 and 1966 was 9,606--a decline of 14 percent. The number of jobs declined in every major category except electrical machinery and equipment (up 65 jobs) and central administrative offices and auxiliary units (up 2,648 jobs). Not counting administrative and auxiliary employment, manufacturing employment in the other categories declined by 12,254 jobs. As Table 4 shows, the biggest losses occurred in food and kindred products (2,271), nonelectrical machinery (2,210), furniture and fixtures (1,864), and apparel (1,126).

Despite significant loss of jobs in important segments of manufacturing, employment tended to be increasingly concentrated in four major categories:

Food and Kindred Products

Apparel

Printing and Publishing

Fabricated Metal Products

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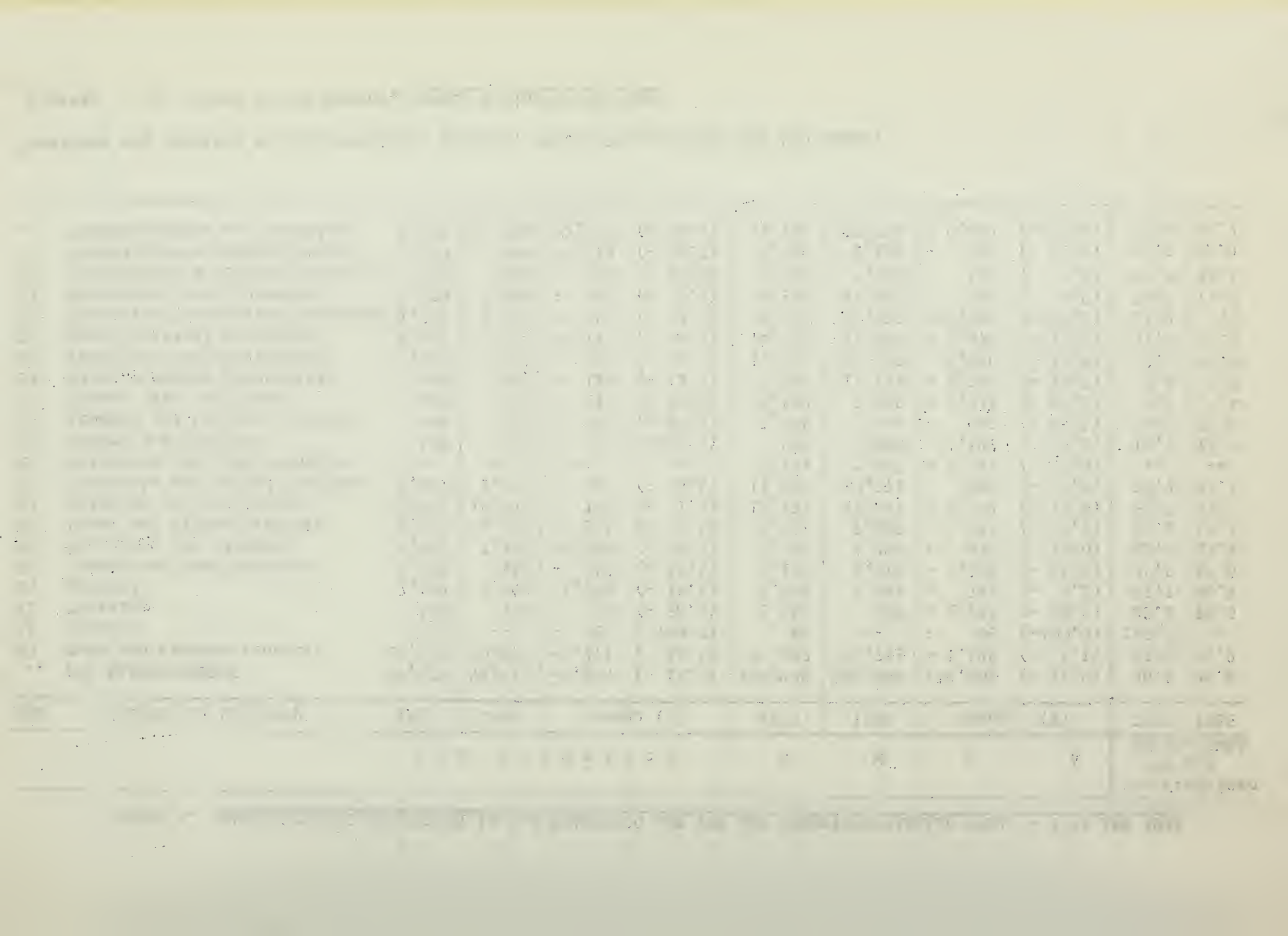
*Much of San Francisco's employment in transportation, communication, and other public utilities consists of clerical and administrative workers.

TABLE 4. MANUFACTURING EMPLOYMENT IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA* - 1953 AND 1966

SIC	Industrial Category	San Francisco 1953	San Francisco 1966	San Francisco Change (%)	SMSA 1953	SMSA 1966	SMSA Change (%)	San Francisco as a % of the SMSA 1953	San Francisco as a % of the SMSA 1966
...	ALL MANUFACTURING	69,479	59,873	-9,606 (- 13.8)	180,978	200,880	+19,902 (+ 11.0)	38.4	29.8
20	Food and Kindred Products	12,573	10,302	-2,271 (- 18.1)	27,607	28,733	+ 1,126 (+ 4.1)	45.5	35.9
21	Tobacco	89	--	- 89 (-100.0)	89	--	- 89 (-100.0)	100.0	--
22	Textiles	430	177	- 253 (- 58.8)	1,855	620	- 1,235 (- 66.6)	23.2	28.5
23	Apparel	7,974	6,848	-1,126 (- 14.1)	8,654	7,941	- 713 (- 8.2)	92.1	86.2
24	Lumber and Wood Products	1,108	360	- 748 (- 67.5)	3,122	1,818	- 1,304 (- 41.8)	35.5	19.8
25	Furniture and Fixtures	3,042	1,178	-1,864 (- 61.3)	4,770	4,294	- 476 (- 10.0)	63.8	27.4
26	Paper and Allied Products	1,373	1,042	- 331 (- 24.1)	5,822	7,599	+ 1,777 (+ 30.5)	23.6	13.7
27	Printing and Publishing	10,429	10,274	- 155 (- 1.5)	15,275	17,867	+ 2,592 (+ 17.0)	68.3	57.5
28	Chemicals and Allied Products	2,597	1,651	- 946 (- 36.4)	11,435	10,771	- 664 (- 5.8)	22.7	15.3
29	Petroleum and Coal Products	--	--	-- --	7,927	5,605	- 2,322 (- 29.3)	--	--
30	Rubber and Plastics	108	291	+ 183 (+169.4)	596	2,088	+ 1,492 (+250.3)	18.1	13.9
31	Leather and Leather Products	706	282	- 424 (- 60.1)	1,604	944	- 660 (- 41.1)	44.0	29.9
32	Stone, Clay and Glass	466	578	+ 112 (+ 24.0)	5,478	7,850	+ 2,372 (+ 43.3)	8.5	7.4
33	Primary Metals Industrials	986	863	- 123 (- 12.5)	13,398	11,133	- 2,265 (- 16.9)	7.4	7.8
34	Fabricated Metal Products	7,099	6,241	- 858 (- 12.1)	17,910	20,860	+ 2,950 (+ 16.5)	39.6	29.9
35	Non-Electrical Machinery	4,561	2,351	-2,210 (- 48.5)	14,332	12,858	- 1,474 (- 10.3)	31.8	18.3
36	Electrical Machinery & Equipment	1,714	1,779	+ 65 (+ 3.8)	7,820	18,418	+10,598 (+135.5)	21.9	9.7
37	Transportation Equipment	3,373	3,093	- 280 (- 8.3)	16,242	17,043	+ 801 (+ 4.9)	20.8	18.1
38	Instruments & Related Products	553	260	- 293 (- 53.0)	1,495	1,618	+ 123 (+ 8.2)	37.0	16.1
39	Miscellaneous Manufacturing	1,477	904	- 573 (- 38.8)	2,760	2,154	- 606 (- 22.0)	53.5	42.0
...	Administrative and Auxiliary	8,721	11,369	+2,648 (+ 30.4)	11,186	20,793	+ 9,607 (+ 85.9)	78.0	54.7

*Includes the counties of San Francisco, Alameda, Contra Costa, Marin and San Mateo.

Source: U. S. Bureau of the Census, County Business Patterns.



In 1953 these four categories provided 63 percent of San Francisco's manufacturing employment, excluding separately reported administrative and auxiliary employment. By 1966, even though all four of these categories had fewer jobs, they accounted for 69 percent.

As Table 4 shows, the number of jobs in manufacturing grew by 12,902, or 11 percent, in the SMSA in this period. SMSA employment, however, did not increase in every manufacturing category. The losses in San Francisco were too great in some cases to offset the growth occurring in the metropolitan area outside San Francisco. Table 5 gives the changes for the four counties outside San Francisco. It shows a much more consistent picture of suburban industrial growth than figures for the SMSA as a whole. In this four-county area, 59 percent of the manufacturing growth was in electrical machinery and equipment* and in administrative and auxiliary employment. Another 34 percent of the growth was in the combined increase in food and kindred products, printing and publishing, and fabricated metal products. The only sizable employment drop outside San Francisco was the loss of 2,322 jobs in chemicals and allied products and of 2,142 jobs in the primary metals industries.

Contract Construction

Contract construction, including special trade contractors, remained fairly stable in San Francisco during the period from 1953 to 1966, at the end of which time the net loss in jobs was only 430 (see Table 6). Contract construction in the SMSA, on the other hand, grew by 8,440 jobs. The

*The bulk of the growth in electrical machinery and equipment took place in San Mateo County.

TABLE 5. MANUFACTURING EMPLOYMENT IN THE FOUR COUNTIES* OF THE SAN FRANCISCO-OAKLAND SMSA OUTSIDE SAN FRANCISCO - 1953 AND 1966

SIC	Category	1953	1966	Change	(%)
...	ALL MANUFACTURING	111,499	141,007	+29,508	(+ 26.5)
20	Food and Kindred Products	15,034	18,431	+ 3,397	(+ 22.6)
21	Tobacco	--	--	--	--
22	Textiles	1,425	443	- 982	(- 68.9)
23	Apparel	680	1,093	+ 413	(+ 60.7)
24	Lumber and Wood Products	2,014	1,458	- 556	(- 27.6)
25	Furniture and Fixtures	1,729	3,116	+ 1,387	(+ 80.3)
26	Paper and Allied Products	4,442	6,557	+ 2,108	(+ 47.4)
27	Printing and Publishing	4,846	7,593	+ 2,747	(+ 56.7)
28	Chemicals and Allied Products	8,838	9,120	+ 282	(+ 3.2)
29	Petroleum and Coal Products	7,927	5,605	- 2,322	(- 29.3)
30	Rubber and Plastics	488	1,797	+ 1,309	(+268.2)
31	Leather and Leather Products	898	662	- 236	(- 26.3)
32	Stone, Clay and Glass	5,012	7,272	+ 2,260	(+ 45.1)
33	Primary Metals Industrials	12,412	10,270	- 2,142	(- 17.3)
34	Fabricated Metal Products	10,811	14,619	+ 3,808	(+ 35.2)
35	Nonelectrical Machinery	9,771	10,507	+ 736	(+ 7.5)
36	Electrical Machinery and Equipment	6,106	16,639	+10,533	(+172.5)
37	Transportation Equipment	12,869	13,950	+ 1,081	(+ 8.4)
38	Instruments and Related Products	942	1,358	+ 416	(+ 44.2)
39	Miscellaneous Manufacturing	1,283	1,250	- 33	(- 2.6)
...	Administrative and Auxiliary	2,465	9,424	+ 6,959	(+282.3)

* Includes the counties of Alameda, Contra Costa, Marin, and San Mateo.

Source: U. S. Bureau of Census, County Business Patterns.

TABLE 6. EMPLOYMENT IN CONTRACT CONSTRUCTION AND UTILITIES IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA* - 1953 and 1966

		San Francisco				SMSA				San Francisco as a % of the SMSA	
SIC	Category	1953	1966	Change	(%)	1953	1966	Change	(%)	1953	1966
15-17	Contract Construction	24,024	23,594	- 430	(- 1.8)	57,341	65,781	+ 8,440	(+14.7)	41.9	35.9
...	Transportation, Communications, & Other Public Utilities	44,955	49,309	+4,354	(+ 9.7)	77,480	97,515	+20,035	(+25.9)	58.0	50.6
42	Trucking & Warehousing	6,034	6,353	+ 319	(+ 5.3)	11,876	17,942	+ 6,066	(+51.1)	50.8	35.4
44	Water Transportation	9,454	8,669	- 785	(- 8.3)	10,178	9,102	- 1,076	(-10.6)	92.9	95.2
45	Transportation by Air	577	4,002	+3,425	(+593.6)	10,318	18,639	+ 8,321	(+80.6)	5.6	21.5
48	Communications	10,575	N.A.	N.A.	N.A.	18,495	24,200	+ 5,705	(+30.8)	57.2	N.A.
49	Electric, Gas, & Sanitary Services	10,574	N.A.	N.A.	N.A.	13,625	12,555	- 1,070	(- 7.9)	77.6	N.A.
...	Other Transportation & Utilities	7,741	N.A.	N.A.	N.A.	12,988	15,077	+ 2,089	(+16.1)	59.6	N.A.

* Includes the counties of San Francisco, Alameda, Contra Costa, Marin, and San Mateo.

Source: U.S. Bureau of the Census, County Business Patterns.

continuing office boom and significant urban renewal has accounted for the steady employment in San Francisco; the outward expansion of metropolitan development has resulted in the growth of contract construction employment in the other counties.

Transportation, Communications, and Other Public Utilities

Although employment in this field increased in San Francisco by 4,354 jobs between 1953 and 1966 (see Table 6), 79 percent of this was in transportation by air. Most of this, in turn, was attributable to the proliferation of firms that arrange air travel. Much of the employment in the entire field of public utilities, in fact, is in administrative, clerical, and technical jobs. This is especially true for San Francisco which has the main offices of Pacific Gas and Electric, Pacific Telephone, and several steamship lines.

Outside San Francisco, employment in transportation, communications, and other public utilities rose by 15,681 jobs. Two-thirds of this was in trucking and warehousing, and transportation by air. Although no figures are available, these new jobs outside San Francisco have tended to be concentrated more in the operating functions than in the administrative functions of the industry.

Wholesale Trade

The loss of employment in wholesale activities in San Francisco appears to have slowed down. Between 1953 and 1959 there was a loss of 5,693 jobs; between 1959 and 1966 the loss was only 693. As Table 7 shows, there was actually a gain in six main categories of wholesaling in the latter period:

TABLE 7. EMPLOYMENT IN WHOLESALE TRADE IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA.* - 1953, 1959 and 1966

SIC	Category	1953	1959		1966	
		Number	Number	Change (%)	Number	Change (%)
50	TOTAL SMSA	67,091	71,431	+4,340 (+ 6.5)	78,987	+7,556 (+ 10.6)
50	TOTAL SAN FRANCISCO	49,249	43,556	-5,693 (-11.6)	42,863	- 693 (- 1.6)
501	Motor Vehicles and Automotive Equipment		2,494		1,712	- 782 (- 31.4)
502	Drugs, Chemicals, and Allied Products		2,245		1,511	- 734 (- 32.7)
503	Dry Goods and Apparel		1,101		1,286	+ 185 (+ 16.8)
504	Groceries and Related Products		6,570		6,880	+ 310 (+ 4.7)
505	Farm Products: Raw Materials		260		141	- 119 (- 45.8)
506	Electrical Goods		3,083		4,403	+1,320 (+ 42.8)
507	Hardware, Plumbing, and Heating Equipment		2,234		1,845	- 389 (- 17.4)
508	Machinery, Equipment, and Supplies		8,623		8,887	+ 264 (+ 3.1)
509	Miscellaneous Wholesalers		15,547		13,380	-2,167 (- 13.9)
5091	Metals and Minerals, Except Petroleum		1,219		1,673	+ 454 (+ 37.2)
5095	Beer, Wine and Distilled Beverages		1,411		1,297	- 114 (- 8.1)
5096	Paper and Its Products		1,818		1,562	- 256 (- 14.1)
5097	Furniture and Home Furnishings		1,803		1,720	- 830 (- 46.0)
5098	Lumber and Construction Materials		2,175		1,691	- 484 (- 22.3)
....	Other Miscellaneous Wholesalers		7,121		5,437	-1,684 (- 23.6)
....	Administrative and Auxiliary		1,399		2,818	+1,419 (+101.4)

*Includes the counties of San Francisco, Alameda, Contra Costa, Marin, and San Mateo.

Source: U.S. Bureau of the Census, County Business Patterns.

Dry Goods and Apparel

Groceries and Related Products

Electrical Goods

Machinery, Equipment, and Supplies

Metals and Minerals, except Petroleum

Administrative Offices and Auxiliary Units

The most significant growth took place in wholesaling of electrical goods and in administrative offices and auxiliary units.

Although San Francisco in 1966 still retained 54 percent of the wholesaling jobs in the SMSA, it has greatly slipped from its 1953 position of pre-eminence when 73 percent of the jobs were here. As in the case of manufacturing, the overall growth of wholesale activities in the Bay Area has occurred outside San Francisco. Between 1953 and 1966 wholesale employment more than doubled in that part of the SMSA outside San Francisco.

Nonindustrial Employment

Industrial employment in both San Francisco and the SMSA represents a decreasing proportion of the total employment in all activities. In San Francisco industrial employment was 36 percent of total employment in 1966, as opposed to 42 percent in 1958. During this period, the number of jobs in San Francisco in (1) finance, insurance, and real estate; (2) services; and (3) government increased by 49,400, far outweighing the loss of industrial jobs.

In the SMSA, industrial employment was 38 percent of total employment in 1966, compared with 43 percent in 1958. The growth of nonindustrial employment, especially in services and government, far surpassed industrial growth.

Conclusions

Except in the field of the utilities, with their numerous white-collar employees, the expansion of industrial employment took place in the counties outside San Francisco between 1953 and 1966. The loss of jobs in the declining segments of San Francisco's industry, however, has not been uniform. In manufacturing, for example, 75 percent of the remaining jobs were in five fields in 1966, in contrast with 67 percent in 1953:

Food and Kindred Products

Apparel

Printing and Publishing

Fabricated Metal Products

Administrative Offices and Auxiliary Units

Although employment has declined in all these activities except the last one, they remain, by and large, the basis of San Francisco's manufacturing employment.

The growth of employment in central administrative offices and auxiliary units occurred in both manufacturing and wholesale trade. Together with the large administrative establishments of the utilities, this growth emphasizes the role that San Francisco plays as administrative center for the region.

Statistics showing the loss of industrial jobs in San Francisco overstate to a certain degree the impact on the blue-collar workers living in San Francisco. Many of the industrial jobs lost in San Francisco were almost certainly held by commuters from outside the city. A 1967 survey of industry in San Francisco* revealed that out of 448 firms, there were 143 firms, or nearly

*Greater San Francisco Chamber of Commerce, Industrial Survey of San Francisco (1967), April 1968. See section on FIRM MIGRATION.

Conclusion

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[illegible] and Relocation

[illegible] Job Generation

[illegible] Manufacturing [illegible] Employment Shifts

additional employment [illegible] [illegible] service jobs [illegible] they necessarily add jobs, the [illegible] of [illegible] economic activities.

The growth of employment in central administrative offices and auxiliary units occurred in both manufacturing and [illegible] firms. Together with the large [illegible] the establishment of the [illegible], this growth emphasizes the role that [illegible] may [illegible] for the region.

Statistics [illegible] the loss of industrial jobs in the Functional Economy [illegible] a certain decline [illegible] blue-collar workers living in San Francisco. Many of the industrial jobs lost in San Francisco were [illegible] by households from outside the city. A 1967 survey of industry in San Francisco* revealed that out of 41[illegible] firms, there were 143 firms, or nearly

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*Greater San Francisco Chamber of Commerce, Industrial Survey of San Francisco (1967), April 1967. See Section on FIRM MIGRATION.

one-third, with half or more of their employees living outside San Francisco. In only 135 firms, or 30 percent, did fewer than 10 percent of the employees live outside the city. The following breakdown illustrates how widespread commuting is even among industrial workers:

Percent of Employees Living Outside San Francisco	Number of Firms	Percent of Total
0 - 9	135	30
10 - 19	40	9
20 - 34	87	19
35 - 49	43	10
50 or More	143	32
Total	448	100

For those blue-collar residents of San Francisco who have been affected by the shrinking industrial job market here, there effectively remain two alternatives: (1) secure employment inthe growing industrial areas outside San Francisco; or (2) abandon or adapt their industrial skills and gain employment in the expanding sectors of the local job market.

In the case of the first alternative, many industrial workers have, in fact, left the city and found employment in other areas. The second alternative--adaptation to the expanding job opportunities in finance, government, and services--is more difficult than the first. The extent to which workers are willing or able to pursue successfully either of these alternatives poses a major question.

Another way of looking at this problem is to consider what action the city might take. If the city successfully pursued the promotion of industrial expansion in San Francisco, new industrial job opportunities might offset the loss that has already occurred. Given existing trends it is probable that this approach would be costly and demand a major local effort. It is not clear, furthermore, that this approach would be successful.

LOCATION

Practically all the industrial development in San Francisco has taken place on the flat areas in the eastern one-quarter of the city. Map 1, showing the land devoted to industry, is based on the city-wide survey of land use* conducted during the years 1961 to 1964. Within this overall picture of industrial development particular industries have shown a preference for locating in certain areas of the city. This locational preference is based on the recognition of specific needs and evaluation of certain locations in fulfilling these needs. Two of the strongest factors in determining the best location for industry are: (1) land and floor space requirements; and (2) proximity to suppliers and/or customers.

Apparel manufacturing typically is carried on in loft space or other inexpensive space found in or near the central business district--a location convenient both for workers in this industry and for buyers of the finished products. Printers find it advantageous to be near their downtown customers and, like the garment industry, desire the relatively inexpensive space that is found in older buildings. Processors of food such as coffee and fish traditionally have located near the waterfront where the supply arrives. Wholesalers of restaurant equipment, dry goods, and office equipment prefer close-in locations; wholesalers of industrial equipment and supplies and other commodities stocked in large quantity are located away from the central area.

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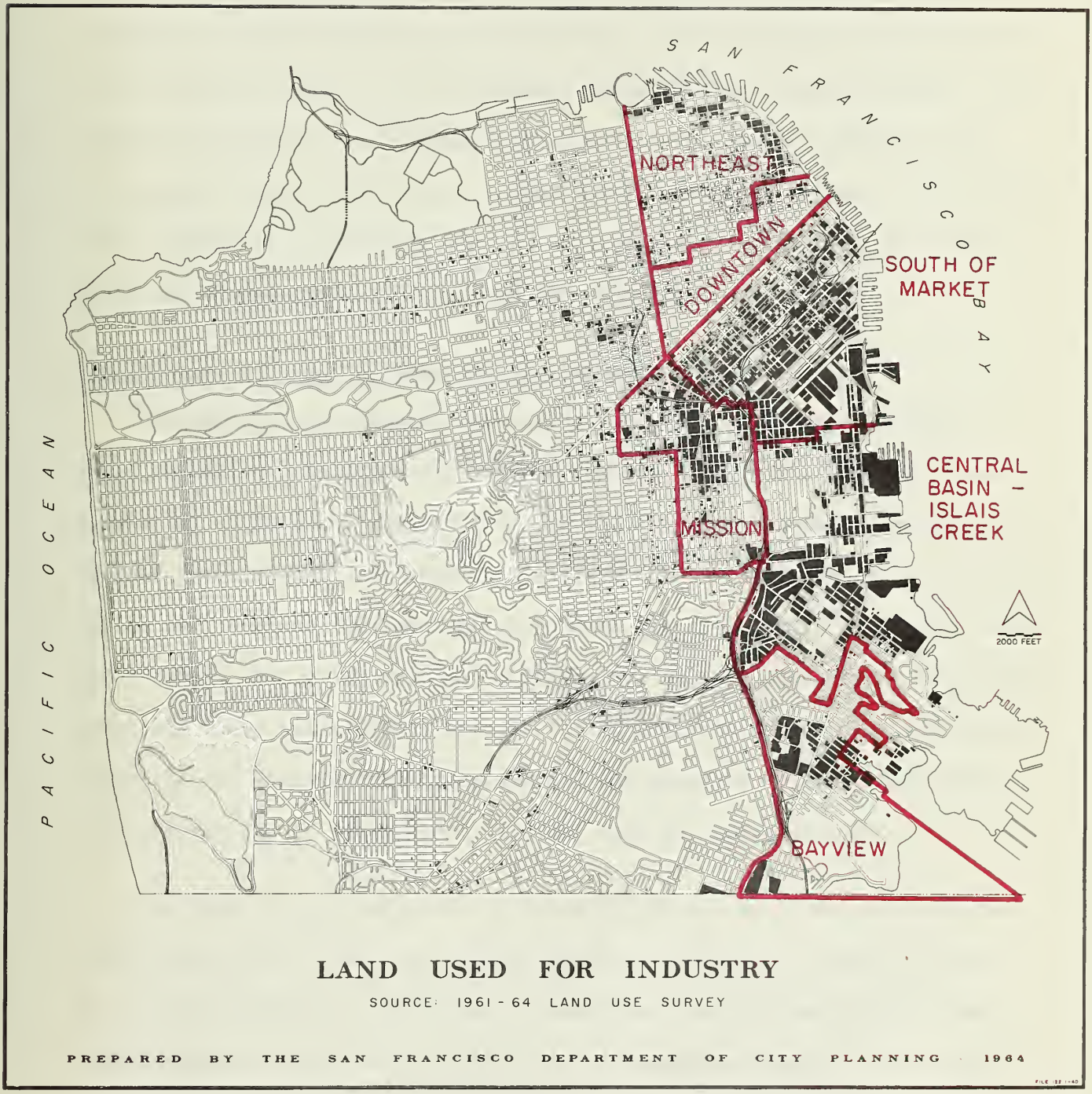
* Not classified as industry in that survey were: (1) publicly-owned industrial facilities such as Hunters Point Naval Shipyard, government warehouses, and the wharves; and (2) transportation and other utilities.



LAND USED FOR INDUSTRY

SOURCE: 1961 - 64 LAND USE SURVEY

PREPARED BY THE SAN FRANCISCO DEPARTMENT OF CITY PLANNING 1964

INDUSTRIAL DISTRICTS OF THE COMMUNITY RENEWAL PROGRAM SURVEY

Map 1

There have been planned attempts at altering some of the traditional patterns. The produce market was moved out of its old downtown waterfront location to a more spacious outlying center. The development and promotion of an outlying "apparel city", however, met with only limited support. Proposals to establish new "centers" for specific industries ordinarily will not succeed unless most members of the industry support the move. New space means higher costs and those who do not join the group gain a competitive advantage by remaining in less expensive quarters.

The Industrial Survey of the Community Renewal Program

San Francisco's industry was surveyed in 1964 by Arthur D. Little, Inc., as part of the Community Renewal Program. The basic purpose of the survey was to evaluate the condition of industry. All establishments were grouped into general functional classifications corresponding to major categories and tabulated for each establishment the employment, land area, and floor space. The concentration or dispersion of industrial employment, land area, and floor space within the city's industrialized areas is particularly important for planning public facilities and services or for understanding the consequences of other public actions such as redevelopment.

The 1964 survey, while not a city-wide survey, did cover most of the industrial areas. There are certain problems, however, in using the data to show distribution of individual industries. One problem is that many establishments either were omitted or were included in a recurring classification identified simply as "special". This is apparent because the industry-wide employment figures for industrial categories in the survey fall far short of the known totals. Another problem is that transportation

activities, as public utilities, were combined with the manufacturing and repair of transportation equipment into a single category "transportation". The usefulness of this survey is limited. Still, so far as it goes, the survey does show in relative terms the importance of particular industries in different areas of the city.

Intensity of Development in the City's Industrial Areas

From the survey the following six major industries have been selected* to show a representative picture of the location of industry in San Francisco:

Contract Construction
Food and Kindred Products (Manufacturing)
Apparel Manufacturing
Printing and Publishing
Fabricated Metal Products and
Nonelectrical Machinery Manufacturing
Wholesale Trade

In terms of known total employment, these six industries had 98,416 employees in 1964, or 60 percent of the total industrial employment. Tables 8 through 13 give the location of employment, land area, floor space, and employment density for these six industries in the six industrial areas of San Francisco that are shown on Map 1. Table 14 summarizes this information.

The most significant aspect of industrial location is the dominance of the South of Market District in so much of the industrial picture. Of the

*Transportation, communications, and other public utilities were not selected because of the combining of manufacturing and utility statistics for "transportation".

TABLE 8. LOCATION OF CONTRACT CONSTRUCTION* IN SAN FRANCISCO - 1964

Industrial Area	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	--	--	--	--	--	--	--
Downtown	1,308	31	253.9	19	1.3	3	990.9
South of Market	2,112	51	571.0	42	11.2	28	188.9
Mission	288	7	106.2	8	1.9	5	153.7
Central Basin-Islais Creek	393	9	383.1	28	19.7	49	19.9
Bayview	64	2	48.5	4	6.2	15	10.4
TOTALS**	4,165	100	1,362.7	100	40.3	100	103.3

* The location does not represent construction sites but the location of the contracting firms.

** Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 9. LOCATION OF FOOD AND KINDRED PRODUCTS (MANUFACTURING) IN SAN FRANCISCO - 1964

	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
Industrial Area	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	732	8	595.0	11	8.4	10	87.3
Downtown	395	5	149.8	3	1.2	1	339.4
South of Market	1,999	23	1,383.3	25	17.3	21	115.3
Mission	3,511	40	1,736.0	31	21.8	26	161.0
Central Basin-Islais Creek	1,536	18	1,359.8	24	29.8	34	51.6
Bayview	516	6	396.0	7	5.9	7	87.7
TOTALS*	8,689	100	5,619.9	100	84.4	100	103.0

* Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 10. LOCATION OF APPAREL MANUFACTURING IN SAN FRANCISCO - 1964

Industrial Area	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	564	18	118.8	11	3.1	30	183.9
Downtown	36	1	23.5	2	0.4	4	93.3
South of Market	2,033	66	799.1	71	5.4	53	375.9
Mission	375	12	150.0	13	1.0	10	384.4
Central Basin-Islais Creek	62	2	33.8	3	0.3	3	203.1
Bayview	--	--	--	--	--	--	--
TOTALS*	3,070	100	1,125.2	100	10.2	100	301.0

* Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 11. LOCATION OF PRINTING AND PUBLISHING IN SAN FRANCISCO - 1964

	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
Industrial Area	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	743	11	387.9	12	3.2	10	230.2
Downtown	1,310	19	347.3	10	2.7	9	478.7
South of Market	4,162	60	2,266.6	67	19.2	63	216.5
Mission	650	9	340.3	10	5.1	17	128.0
Central Basin-Islais Creek	--	--	--	--	--	--	--
Bayview	35	1	27.5	1	0.4	2	74.4
TOTALS*	6,900	100	3,369.6	100	30.6	100	225.5

* Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 12. LOCATION OF FABRICATED METAL PRODUCTS AND NONELECTRICAL MACHINERY MANUFACTURING IN SAN FRANCISCO - 1964

	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
Industrial Area	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	139	2	380.0	6	1.0	1	139.3
Downtown	--	--	--	--	--	--	--
South of Market	1,592	20	1,691.8	26	20.8	19	76.6
Mission	1,472	18	1,121.6	17	11.6	10	127.1
Central Basin-Islais Creek	2,200	27	2,123.3	33	48.4	44	45.5
Bayview	2,681	33	1,136.0	18	29.2	26	91.9
TOTALS*	8,134	100	6,452.7	100	111.0	100	73.3

* Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 13. LOCATION OF WHOLESALE TRADE IN SAN FRANCISCO - 1964

	Employment		Floor Space		Land Area		Employment Density (No. of employees per acre of land area)
Industrial Area	Number	% of Total	Sq.Ft. (000)	% of Total	Acres	% of Total	
Northeast	543	3	1,067.7	8	8.8	4	61.4
Downtown	2,516	16	604.1	4	3.4	2	730.2
South of Market	7,463	47	7,892.5	59	85.0	41	87.8
Mission	1,330	9	1,358.0	10	18.8	9	73.5
Central Basin-Islais Creek	2,825	18	1,823.3	14	83.7	40	33.8
Bayview	1,019	6	714.2	5	9.5	5	107.7
TOTALS*	15,746	100	13,459.8	100	209.2	100	75.3

* Total employment figures reported in this survey are considerably less than the known employment in the industry. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

TABLE 14. EMPLOYMENT DENSITY IN SIX LEADING INDUSTRIES* IN SAN FRANCISCO - 1964

Industrial Area	Employment	Land Area (acres)	Employees per Acre
Northeast	2,771	24.5	113.1
Downtown	5,565	9.0	618.3
South of Market	19,361	158.9	121.8
Mission	7,676	60.2	127.5
Central Basin-Islais Creek	7,016	181.9	38.6
Bayview	4,315	51.2	84.3
TOTALS**	46,704	485.7	96.2

* Contract construction, food and kindred products (manufacturing), apparel manufacturing, printing and publishing, fabricated metals and nonelectrical machinery manufacturing, and wholesale trade.

** Total employment figures reported in this survey are considerably less than known employment in the six industries. Data should, therefore, be regarded as a large sample.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.

46,704 jobs reported by the survey* in the six leading industrial categories selected, 19,361, or 41 percent, were reported in the South of Market District; of the 31,389,900 square feet of floor space devoted to these activities, 14,604,300 square feet, or 47 percent, were located in said district.

Although the district had nearly half the total reported floor space in the selected industrial groups, it had only one-third of the total land occupied by these industries, or 159 acres out of a total 486 acres. This bears out what a casual inspection of the area shows--that the South of Market District is an intensively developed industrial area. The industrial floor area ratios (F.A.R.) for the six areas are as follows:

Northeast	2.4 to 1
Downtown	3.5 to 1
South of Market	2.1 to 1
Mission	1.8 to 1
Central Basin-Islais Creek	0.7 to 1
Bayview	1.0 to 1

The relatively low F.A.R. found in the Central Basin-Islais Creek and Bayview industrial development reflects the small amount of "space-intensive" apparel manufacturing and printing and publishing, and the large areas devoted to the more sprawling types of industrial development.

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*Only half the total known city-wide employment in these six industries was reported in the survey. This magnitude of discrepancy between known employment and surveyed employment cannot be explained simply by the fact that the survey was not city-wide. A relatively insignificant amount of industry was outside the survey area. The reasons for the discrepancy are unknown.

Clustering of Particular Industries

Tables 8 through 13 portray the tendency displayed by particular industries to cluster in certain parts of the city's industrialized area. Thus, as Table 8 shows, contract construction establishments were concentrated in 1964 in the South of Market, Central Basin-Islais Creek, and Bayview areas. Contractors' yards in the two areas outside South of Market accounted for the excess of land area over floor space in those areas.

Processors of food and kindred products were concentrated in the South of Market, Mission, and Central Basin-Islais Creek areas. Table 9 shows this industry as a fairly intensive user of land in that the amount of floor space greatly exceeded the land area.

Most of the apparel manufacturing (Table 10) was found in the Northeast, South of Market, and Mission areas, with the South of Market District clearly the leading area. The planned industrial complex designed as "Apparel City" in the Central Basin-Islais Creek area has been utilized largely by other industries. The need for inexpensive, nonspecialized industrial space has drawn the garment makers to the close-in industrial areas of the city. These areas not only have the required space but they are within walking distance of workers' residences or served by good public transportation. They are also close to downtown retailers and showrooms.

San Francisco's printing and publishing industry is centered in the Downtown and nearby areas. These close-in areas satisfy the industry's desire for cheap space and for proximity to commercial and industrial customers. Although the South of Market District had the largest concentration of printing and publishing, as Table 11 shows, the Northeast, Downtown, and Mission areas also had a significant part of the industry.

Establishments producing fabricated metal products and nonelectrical machinery have less compelling need for downtown locations than do other industries. The chief reason for a central location is probably the availability of cheap space in the older industrial buildings. There is a great diversity of types of establishments in this field of manufacturing, however, and the outlying locations are more suitable for those firms that have extensive manufacturing operations and need land for off-street parking and loading. As Table 12 indicates, the Downtown area had none and the Northeast area had only a minor proportion of the industry.

Finally, wholesale trade was clearly concentrated in the South of Market District. The secondary role of Central Basin-Islais Creek as a wholesaling area is important because of the concentration of a large proportion (40 percent) of the total land area there (see Table 13), The distinction between wholesalers with stocks and wholesalers without stocks is important to the subject of industrial location, but the industrial survey conducted in connection with the Community Renewal Program did not differentiate between the two types.

Conclusions

The affinity of certain major industrial categories for a South of Market location reflects both the availability of inexpensive space and the desire for a central location. Characterized by older, generally low-rise structures, the South of Market District represents the "soft side" of the central business district. This important industrial area, however, is subject to influences that threaten the continuation of industry. The poor condition of many structures, the construction of new financial and administrative office buildings, current redevelopment, and the growing demand for off-

street parking are all reducing the usable industrial space inventory South of Market Street.

The amount of industry has already declined greatly in the Northeast and Downtown areas, due chiefly to the suitability of the industrial sites for other uses. Further decline of industry there and in the South of Market District can be expected. The conscious development of official policy dealing with the retention of industry in close-in locations appears to be a necessity.

THE PORT

In 1964, San Francisco's maritime commerce directly accounted for 22,722 jobs with a payroll of $195,504. The spending of this payroll, in turn, further stimulated the economy to the extent of supporting between 30,000 and 45,000 additional jobs in San Francisco. It is estimated that port activities are responsible--directly and indirectly--for about 12 percent of the total number of jobs in the City of San Francisco.*

From the standpoint of tonnage alone, the Port of San Francisco handles a relatively small proportion of all waterborne cargo passing through the Golden Gate and San Francisco Bay. Most of the total tonnage is bulk cargo or commodities handled largely by the other Bay Area ports and ports such as Stockton and Sacramento (see Tables 15 and 16). San Francisco, instead, is a "general cargo port", as opposed to a "bulk cargo port".

San Francisco's reputation as one of the nation's leading ports derives not from the tonnage but from the value of the goods handled. Foreign trade has become an increasingly important part of San Francisco's waterborne commerce (see Table 17), and a significant proportion of this foreign trade comprises manufactured or processed goods (see Tables 18 and 19).

Foreign trade has a particularly strong impact on San Francisco's economy. The Arthur D. Little report of 1966 estimated that each ton of foreign trade is responsible for $98.41 of payroll attributable to port activities, while the corresponding impact of each ton of inland trade,** for example,

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*Arthur D. Little, Inc., The Port of San Francisco, September 1966.

**"Inland Trade" includes the shipment of cargo that originates in one part of the country and is transported via inland waterways to another part.

TABLE 15. LEADING IMPORTS, SAN FRANCISCO CUSTOMS DISTRICT*: RELATIVE IMPORTANCE OF PORT OF SAN FRANCISCO

Group	Total Tonnage Through S.F. Customs District (000 short tons)	Port of San Francisco (000 short tons)	S.F. Tonnage as a % of Total Tonnage
Crude Petroleum	3,525	--	--
Wood Pulp	437	6	1
Petroleum Products, NEC	437	--	--
Residual Fuel Oil	372	--	--
Gypsum or Plaster Rock	324	--	--
Jet Fuel	223	--	--
Coffee	154	128	83
Rolled and Finished Steel Mill Products	135	60	44
Copra	115	115	100
Lead Ores, Concentrates, and Scrap	86	70	81

* Includes the State of California north of the counties of San Luis Obispo, Kern, and San Bernardino; Utah; and Nevada, except for Clark County.

Source: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, 1964.

TABLE 16. LEADING EXPORTS, SAN FRANCISCO CUSTOMS DISTRICT*: RELATIVE IMPORTANCE OF PORT OF SAN FRANCISCO

Group	Total Tonnage Through S.F. Customs District (000 short tons)	Port of San Francisco (000 short tons)	S.F. Tonnage as a % Total Tonnage
Iron Ore Concentrates	962	--	--
Coke	870	Less than 500 tons	--
Iron and Steel Scrap	595	Less than 500 tons	--
Residual Fuel Oil	488	6	1
Salt	372	7	2
Rice	248	27	11
Oilseeds, NEC	211	1	--
Fruits and Preparations, Canned	173	7	4
Lubricating Oils and Greases	154	26	17
Lumber and Shingles	145	11	8

* Includes the State of California north of the counties of San Luis Obispo, Kern, and San Bernardino; Utah; and Nevada, except for Clark County.

Source: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, 1964

TABLE 17. IMPORTANCE OF FOREIGN TRADE* TO TOTAL TRADE OF THE PORT OF SAN FRANCISCO, 1940-1965

Year**	Tonnage of Foreign Trade (000 revenue tons)	% of Total Port Revenue Tons
1940	2,345	34
1950	2,696	43
1960	2,767	59
1965	3,164	60

* Includes shipments to and from Alaska and Hawaii, but excludes shipments to and from ports of Western Canada.

** 1940 and 1950 are calendar years; 1960 and 1965 are fiscal years.

Source: San Francisco Port Authority.

TABLE 18. LEADING IMPORTS, PORT OF SAN FRANCISCO: RELATIVE IMPORTANCE TO CUSTOMS DISTRICT*

Group	Total Tonnage Through Port of San Francisco (000 short tons)	% of San Francisco Customs District
Coffee	128	83
Copra	115	100
Lead Ores, Concentrates, and Scrap	70	82
Rolled and Finished Steel Mill Products	60	44
Bananas	59	100
Motor Vehicles	30	97
Iron and Steel Pipe	29	46
Liquors and Wines	24	96
Meats and Products, Fresh	22	96
Tools and Basic Hardware	22	69

* Includes the State of California north of the counties of San Luis Obispo, Kern, and San Bernardino; Utah; and Nevada, except Clark County.

Source: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, 1964.

TABLE 19. LEADING EXPORTS, PORT OF SAN FRANCISCO: RELATIVE IMPORTANCE TO CUSTOMS DISTRICT*

Group	Total Tonnage Through Port of San Francisco (000 short tons)	% of San Francisco Customs District
Fruits and Preparations, Fresh	45	82
Hides and Skins, Raw	41	91
Condensed and Evaporated Milk	38	97
Industrial Chemicals	34	26
Rice	27	11
Lubricating Oils and Greases	26	17
Fruits and Preparations, Dried	17	20
Animal Feeds	17	13
Dried Milk	17	33
Industrial Machinery and Parts, NEC	15	79

* Includes the State of California north of the counties of San Luis Obispo, Kern, and San Bernardino; Utah; and Nevada, except Clark County.

Source: U.S. Army Corps of Engineers, Waterbourne Commerce of the United States, 1964.

is only $2.06. Thus, although inland trade in 1964 comprised 31 percent of the total tonnage of the Port of San Francisco, it generated only one percent of the payroll. The type of cargo carried in foreign trade has much to do with its relatively large impact. General cargo is the major component of foreign trade, while bulk cargo constitutes most of the inland and coastal trade. All the business and governmental activity associated with importing and exporting general cargo far exceeds the activity necessary for handling bulk commodities.

Although total tonnage handled through the Port of San Francisco has increased little in recent years, it is expected to grow by 50 percent between 1965 and 1990. In making this forecast, the Arthur D. Little report predicted that the growth would be predominantly in high-value manufactured goods moving in foreign trade.

This projected growth, however, may fail to accrue to the Port of San Francisco if port facilities are not updated to handle future traffic. The port is presently unprepared for handling containerized cargo on the scale that appears to be developing. About 35 percent of all foreign trade tonnage is suitable for containerization; another 35 percent is possibly suitable for containerization; and only 30 percent is unsuitable. If specialized new containerization facilities are not provided, San Francisco will lose its position of dominance in foreign trade. The Port of Oakland is developing a 140-acre facility which will include the largest containerization terminal on the Pacific Coast. Scheduled redevelopment of parts of Oakland's inner harbor will expand even further its capacity for containerized cargo handling.

It has been recommended that new port facilities be built on that portion of the San Francisco waterfront that is south of the Bay Bridge. The new 68-acre Army Street Terminal at Islais Creek is in this area. It is equipped for both containerized and conventional general cargo. Another facility is planned on the 132 acres now being filled between Islais Creek and India Basin. It is suitable for development as a containership terminal and possibly, in addition, for a "lighter aboard ship" (LASH)* terminal. Finally, the San Francisco Port Authority in 1967 purchased a 35-acre waterfront area from the United States government located between 20th and 22nd Streets. This area is also suitable for a containerized cargo or a LASH facility.

Conclusions

Although a 50 percent growth in tonnage handled by the Port of San Francisco is projected for the period 1965 to 1990, the achievement of this growth is beset by a number of problems. One problem is the accommodation of the new cargo ships. Cargo ships with a draft of 60 feet are already afloat and larger ships are on the drawing boards. Those existing are principally oil tankers, but ships for containerized dry cargo are also being designed on this scale. Dredging the ship channels within San Francisco Bay to a depth of 50 feet will probably be accomplished in the coming years, but further deepening to accommodate these giant ships is unlikely. Offshore loading and unloading might be an alternative to dredging very deep ship channels in the Bay.

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*LASH operations involve the assembly of cargo in lighters or barges which, in turn, are moved to a terminal to be lifted aboard a larger ("mother") ship.

San Francisco will need new facilities to handle its share of the waterborne cargo that will be entering the Bay. These facilities are necessitated by the growing trend toward cargo containerization. The new Army Street Terminal is a good beginning. The potential volume of containerization, however, calls for additional facilities.

The Port of San Francisco will increasingly find itself competing with the Port of Oakland for the general cargo business. New port facilities are under construction and being planned by Oakland. Extensive industrial lands and rail facilities back up Oakland's wharf areas. If the Port of San Francisco is to retain its present volume of shipping and to garner a reasonable share of the increase projected for the region, it must aggressively plan and develop needed modern facilities.

The continued vitality of the port is essential to related industrial activities; manufacturing and food processing dependent on water transportation; warehousing and wholesale distribution; trucking; and a range of industrial functions oriented to maritime trade. Employment in the actual handling of cargo is not likely to share in the growth of port activity. Containerization and other technological changes in methods of cargo handling have greatly shortened loading time. Continuing trends along this line may result in further reduction of manpower requirements on the waterfront.

CONDITION

San Francisco is an old city and much of its industry occupies old buildings. A sample survey of industry conducted by the Greater San Francisco Chamber of Commerce in 1967* revealed that 59 percent of the firms that responded occupied buildings constructed before 1930. Although age alone is not a measurement of condition, age often correlates with deterioration and functional obsolescence.

Included in the 1964 studies by Arthur D. Little, Inc., leading to the formulation of the Community Renewal Program was a survey of the condition of commercial and industrial establishments. An on-site inspection was made of nonresidential lots and buildings in 1,057 blocks in the eastern third of San Francisco. Although the survey did not cover 100 percent of the city's commerce and industry, its chief omissions were the neighborhood shopping districts and other outlying commercial developments.

In arriving at a measure of condition, Arthur D. Little, Inc., considered many physical attributes of the property under such general categories as building age and condition, type of construction, condition of walls and foundations, space layout, and parking and loading space. The evaluation of all the physical attributes resulted in condition scores that were, to some extent, a measure of usefulness as well as simply structural soundness.

On the basis of the condition scores, properties were assigned to one of six condition classifications. No descriptive names were given to the

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*See section on FIRM MIGRATION.

six classifications, and instead, they were designated simply as 1 to 6, with "1" representing the best condition and "6" the poorest.*

The 1964 survey showed that the city's commercial and industrial properties, on the whole, were in good condition (see Table 20). Buildings in the top three condition categories contained 71 percent of all the floor space surveyed. Only 8 percent of the floor space was in the poorest condition classification. Employment was even more concentrated in the better buildings. Of the total employment covered in the condition survey, 79 percent was in buildings in the top three categories and only 4 percent in structures in the poorest classification.

Table 20 does not give a true picture of the condition of industrial development in San Francisco because the commercial space and industrial space were combined and rated together. Condition of industry, nevertheless, can be approximated by looking at building condition in those districts of the city in which industry is the predominant activity. Map 2 highlights the industrialized parts of the city that were included in the

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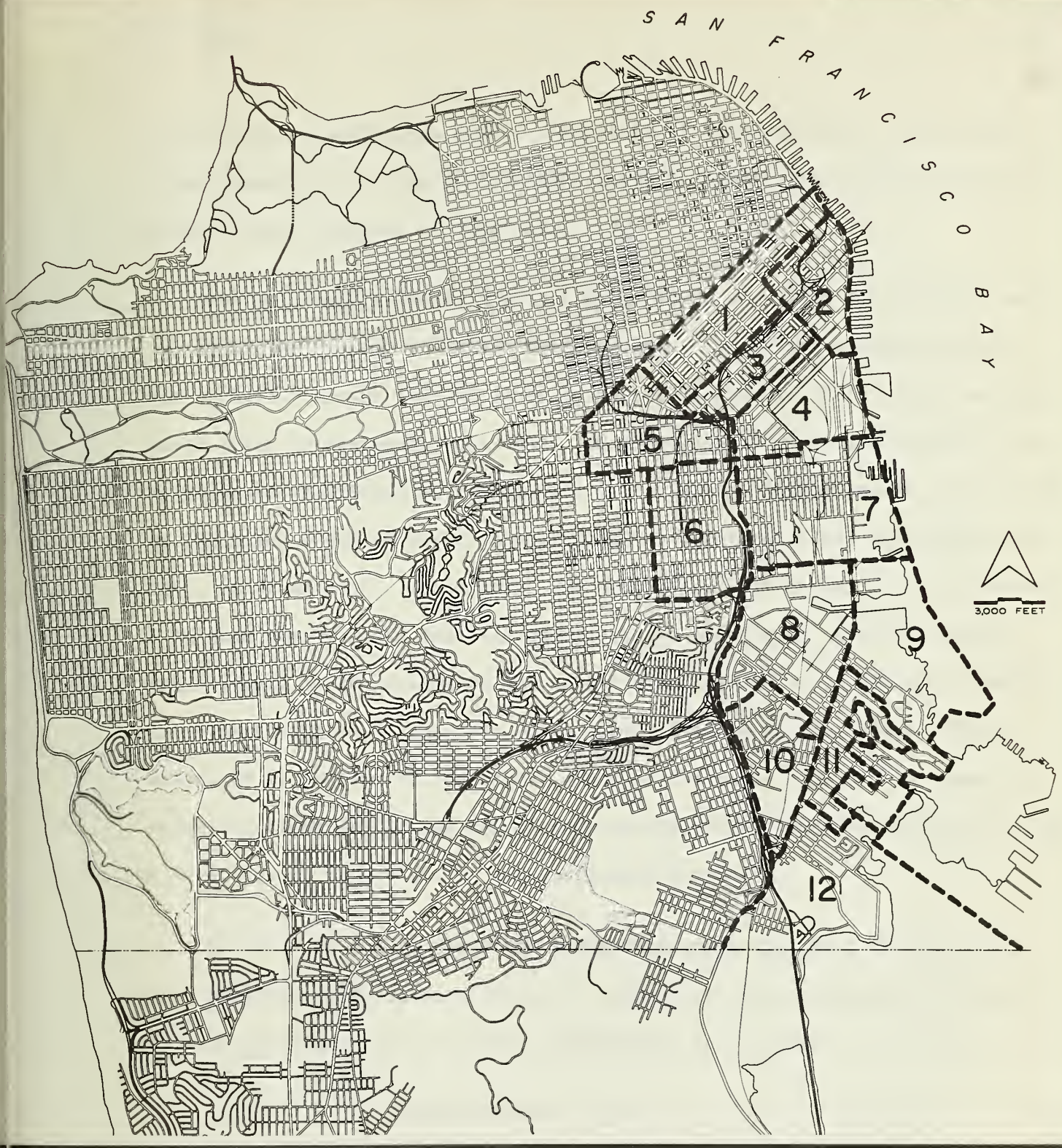
* Arthur D. Little, Inc., in arriving at condition scores for establishments surveyed, purposely avoided assigning adjectives to the six condition classifications. The reason was that words were inadequate to express the precise meaning of each category. Classification 1, however, is "better" than 2, which in turn is "better" than 3, and so forth. Thus, it would not be correct to characterize Condition 6 as "very, very poor" necessarily or Condition 1 as "excellent". The numbers are relative ratings on a scale running from those properties with the highest number of required physical attributes to those properties with the lowest number of required physical attributes. A Condition 6 structure would, therefore, lack a large number of essential features; e.g., the condition of the outside walls, foundation, and roof is poor; the building is not fireproof; it is very old; the condition of the first floor is poor; there are no off-street truck loading spaces; spaces; and so forth. As a rough approximation, properties in Condition 1 could be considered "sound" and those in Condition 6 "blighted".

TABLE 20. PERCENTAGE DISTRIBUTION OF FLOOR SPACE, LAND AREA, AND EMPLOYMENT, BY PROPERTY CONDITION CLASSIFICATION, IN THE EASTERN ONE-THIRD OF SAN FRANCISCO - 1964

Condition Classification	Floor Space		Land Area		Employment	
	Square Feet (000)	% of Total	Acres	% of Total	Number	% of Total
1 (best)	54,523.5	36	558.0	30	114,794	45
2	29,595.0	19	341.9	18	49,959	20
3	24,069.5	16	305.8	16	36,854	14
4	17,070.0	11	235.0	13	27,399	11
5	15,925.5	10	222.0	12	16,736	6
6 (poorest)	12,559.5	8	203.6	11	9,397	4
TOTAL	153,743.0	100	1,866.2	100	255,139	100

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, 1965.



PREDOMINANTLY INDUSTRIALIZED AREAS IN THE COMMERCIAL AND INDUSTRIAL SURVEY OF SAN FRANCISCO - 1964

1	Upper South of Market	7	Central Basin
2	Rincon Hill	8	Islais Creek
3	Bryant - Brannan	9	India Basin
4	Channel	10	Bayview West
5	Northern Mission	11	Bayview East
6	East Mission	12	Candlestick

Map 2

Source: A.D. Little, Inc., "San Francisco Community Renewal Program", 1965

1964 condition evaluation survey. For each of these industrial areas, the total commercial and industrial floor space is broken down into the six condition classifications in Table 21.

The area designated on Map 2 as Upper South of Market had the most serious condition problem in 1964. Rated as Condition 6, the poorest category, was 3,622,500 square feet of floor space, or 18 percent of the total surveyed floor space in the area. Over half the total amount of commercial and industrial space classified as Condition 6 in the industrialized areas was located in the Upper South of Market area. Rated as Condition 5 was 3,422,000 square feet, or 17 percent. Conversely, the proportion of floor space in Condition 1 in this area was the smallest among all the industrial areas: 3,781,000 square feet, or 18 percent of the total, were classified in the top category. Rated as Condition 2, the next best, were 3,291,000 square feet of floor space, or 16 percent of the total. Much of the space included in these top classifications was in the large, substantial office buildings along the south side of Market Street and on New Montgomery Street.

As Table 20 shows, the other industrial areas that have serious condition problems, with between 20 and 30 percent of their commercial and industrial floor space rated as either Condition 5 or 6, were:

Bryant-Brannan	28%
Islais Creek	24%
India Basin	22%
Bayview East	22%

TABLE 21. CONDITION CLASSIFICATION OF COMMERCIAL AND INDUSTRIAL FLOOR SPACE IN PREDOMINANTLY INDUSTRIALIZED AREAS OF SAN FRANCISCO - 1964

Area No.	Area Name	CONDITION 1		CONDITION 2		CONDITION 3		CONDITION 4		CONDITION 5		CONDITION 6		TOTAL	
		Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in the Area	Square Feet (000)	% of Total Floor Space in th Area
1	Upper South of Market	3,731.0	18	3,291.0	16	3,587.0	17	2,894.0	14	3,422.0	17	3,622.5	18	20,597.5	100
2	Rincon Hill	3,829.0	35	2,031.5	19	2,101.5	19	962.0	9	1,088.0	10	885.5	8	10,897.5	100
3	Bryant-Brannan	1,809.0	21	2,486.5	28	1,300.0	15	766.5	9	1,756.0	20	685.0	8	8,803.0	100
4	Channel	1,229.5	26	1,351.5	28	954.5	20	496.5	10	716.0	15	60.0	1	4,808.0	100
5	Northern Mission	3,483.0	49	1,382.0	20	686.5	10	820.0	12	316.5	4	388.0	5	7,076.0	100
6	East Mission	916.0	21	942.0	22	858.5	20	864.5	20	433.0	10	292.0	7	4,306.0	100
7	Central Basin	1,941.5	42	931.0	20	696.0	15	614.5	13	188.5	4	265.5	6	4,637.0	100
8	Islais Creek	1,599.5	26	1,673.5	27	870.0	14	536.5	9	924.5	15	526.0	9	6,180.0	100
9	India Basin	496.0	28	574.5	32	244.5	14	83.5	5	186.0	10	217.0	12	1,801.5	100
10	Bayview West	1,184.0	48	1,153.5	46	136.5	5	7.0	*	0	0	7.0	*	2,488.0	100
11	Bayview East	301.0	35	223.5	26	104.5	12	40.0	5	86.5	10	102.0	12	857.5	100
12	Candlestick	680.5	42	658.5	40	161.0	10	95.0	6	34.5	2	6.5	*	1,636.0	100
	ALL AREAS	21,250.0	29	16,699.0	23	11,700.5	16	8,230.0	11	9,151.5	12	7,057.0	10	74,088.0	100

* Less than one percent of the total floor space in the area.

Source: Arthur D. Little, Inc., San Francisco Community Renewal Program, Technical Paper No. 5, 1965.

The industrial areas with better than 60 percent of the total floor space in either Category 1 or 2, the top two condition classifications, were:

Bayview West	94%
Candlestick	82%
Northern Mission	69%
Central Basin	62%
Bayview East	61%

The Bayview West is as close as San Francisco comes to a model industrial area. The well-maintained buildings and grounds--some attractively landscaped --are a sharp contrast to the areas to the north and east.

Condition and Employment

The number of jobs associated with properties in poor condition is considerable. The commercial and industrial survey of the Community Renewal Program tabulated the employment associated with establishments in the six condition categories and revealed the following relationship for the total industrialized area shown on Map 2:

Condition Category	Employment	Percent of Total
1 (Best)	37,077	38
2	20,621	21
3	15,058	15
4	12,355	13
5	8,248	8
6 (Poorest)	5,236	5
Total	98,595	100

The South of Market industrial areas* had more than their share of the employment associated with the worst conditions. Of the 5,236 jobs in the industrial areas connected with establishments rated as Condition 6, 4,203, or 80 percent, were in the four areas comprising the area generally known as the South of Market District.** Of the 8,248 jobs with Condition 5 establishments, 6,351, or 77 percent, were in the South of Market District.

Conclusions

The large amount of poor or mediocre floor space in San Francisco's industrial areas poses a serious question concerning the future of the enterprises, the persons employed, and the buildings themselves. This is particularly true in the South of Market industrial areas and in the Islais Creek area. In the southeastern part of the city the actual amount of low-quality space was not remarkable, except in the Islais Creek area. Its widespread incidence, nevertheless, tarnishes the image of the area and acts as a deterrent to the utilization of the large amount of vacant land.***

Certain industries can make good use of space that might be considered substandard for many other purposes. As mentioned in the section on LOCATION, printers and apparel manufacturers make extensive use of such space as do wholesalers and special trade contractors. So long as buildings in substandard condition do not become dilapidated and unfit for occupancy, there is a reasonable likelihood of their use by members of industrial groups.

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*These correspond to the areas designated on Map 2 as Upper South of Market, Rincon Hill, Bryant-Brannan, and Channel.

**The section on LOCATION shows the relative importance of the South of Market District in selected industrial activities.

*** See section on VACANT LAND AND FLOOR SPACE.

When facilities have outlived their economic usefulness--through insufficient maintenance, unwillingness of the user to invest in modernization and structural alterations, or technological and other external changes--businesses will move out. There is a real possibility that this obsolescence may go far beyond the need for marginal or near-marginal industrial space. Although individual owners may not suffer from this outcome, employees may suffer and the city may eventually have to assume the responsibility for redeveloping the blighted areas.

In addition to the suitability or soundness of the building itself for any of a number of industrial uses, a decisive factor in evaluating a building's usefulness, from the standpoint of purely economic alternatives, is often the alternative use of the site--with or without the building--for another use. Thus, an obsolescent industrial building may be converted to a shopping complex; another may be demolished for a parking lot; and another may be demolished for a high-rise office building. Industrial structures in or near the downtown area are especially vulnerable in this kind of competition with other economic uses.

Much could be done in the way of aggressive, imaginative refurbishing of obsolescent industrial buildings for industrial re-use. Fireproofing, adding off-street parking and loading areas, installing new freight elevators, and like improvements are expensive, but they may be an economically sound approach to many a forsaken industrial building.

FIRM MIGRATION

The physical condition of industrial structures is only one of the factors that goes into a firm's decision to remain at its present site or to seek a new location. Other factors include adaptability of the building and site to changing technology; need for land for plant expansion; more economical or publicly desirable use of the site for a different activity; shifting markets; transportation needs; and so forth. The decline in the number of industrial firms operating in San Francisco indicates that many firms can better satisfy their locational requirements outside the city.

In every major industry, except transportation,* the number of firms operating in San Francisco declined over the period 1953 to 1966. In some fields, such as contract construction and manufacturing, the decline has been dramatic; in wholesale trade, firms have not decreased in number quite so sharply (see Table 22).

By contrast, in the four counties of the SMSA outside San Francisco the number of industrial establishments increased in every major industrial category. This was true even in the manufacturing fields of apparel and food and kindred products, both of which had fewer firms operating in the metropolitan area as a whole. In this period, the number of manufacturing establishments jumped by 47 percent and wholesale firms nearly doubled in the other four counties.

It would be highly inaccurate to equate firm migration with the drop in the number of establishments in San Francisco. No study has been made of the extent to which this general loss of industrial establishments in San Francisco

*The growth in the number of establishments in transportation (utility) is attributable to the growth of "transportation services", included in which are travel agencies.

TABLE 22. NUMBER OF ESTABLISHMENTS IN LEADING INDUSTRIES IN SAN FRANCISCO AND THE SAN FRANCISCO-OAKLAND SMSA - 1953 and 1964

S.I.C.	Industrial Category	San Francisco			SMSA			SMSA, Excluding San Francisco		
		1953	1966	Change (%)	1953	1966	Change (%)	1953	1966	Change (%)
...	ALL INDUSTRY	7,288	6,403	-855 (-12.1)	14,693	16,739	+2,046 (+13.9)	7,405	10,336	+2,931 (+39.6)
15-17	Contract Construction	1,567	1,157	-410 (-26.2)	5,024	5,081	+ 57 (+ 1.1)	3,457	3,924	+ 467 (+13.5)
...	Manufacturing	2,141	1,734	-407 (-19.0)	4,083	4,589	+ 506 (+12.4)	1,942	2,855	+ 913 (+47.0)
20	Food & Kindred Products	286	215		554	510		268	295	
23	Apparel	315	266		361	342		46	76	
27	Printing & Publishing	404	390		597	708		193	318	
34-35	Fabricated Metal Products & Non-electrical Machinery	364	249		820	1,002		456	753	
...	All Other Manufacturing	772	614		1,750	2,027		978	1,413	
...	Transportation, Communications, & Other Public Utilities*	552	664	+112 (+20.3)	1,205	1,605	+ 400 (+33.2)	653	941	+ 288 (+44.1)
42	Trucking & Warehousing	283	272		690	835		402	563	
50	Wholesale Trade	3,028	2,848	-180 (- 5.9)	4,381	5,459	+1,078 (+24.6)	1,353	2,611	+1,258 (+93.0)

* Excluding railroad employees and employees on oceanborne vessels.

Source: U.S. Bureau of the Census, County Business Patterns.

is due to the movement of going concerns from San Francisco to areas outside the city. Undoubtedly, there have also been many business failures, consolidations, and voluntary liquidations. The rise in the number of industrial firms outside San Francisco, furthermore, is certainly a result of new business formations as well as the relocation of existing firms. The term "firm migration", then, is really the dramatic component of a general loss of industry. It is the one component, nevertheless, that has received the most attention in studies dealing with industrial change.

Several studies have been made to get at the causes of firm migration. Survey questionnaires and interviews have attempted to pinpoint industrialists' dissatisfactions with their location and to estimate the possibility of further movement out of the city. The four pertinent studies are the 1964 Industrial Survey, by the Greater San Francisco Chamber of Commerce; the 1964 Firm Migration Study, conducted by Arthur D. Little, Inc., in formulating the Community Renewal Program for San Francisco; the 1963 South of Market Commercial and Industrial Survey, by the San Francisco Redevelopment Agency; and the 1967 Industrial Survey, again by the Chamber of Commerce. The results of these four surveys are summarized in the following pages.

1964 INDUSTRIAL SURVEY (Greater San Francisco Chamber of Commerce)

The Chamber of Commerce mailed questionnaires to 400 manufacturing firms in San Francisco. Information was solicited concerning existing plant facilities, expansion plans, markets for products, and the advantages and disadvantages of being located in San Francisco. This survey throws light on the general subject of industrial migration because so many firms expressed dissatisfaction with their San Francisco location and announced their intentions to expand outside the city. The following results of the survey are pertinent to the problem of industrial migration.

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Years in San Francisco

The firms responding to the questionnaire had been in San Francisco for an average of 63 years. San Francisco was the head office of 82 percent of these firms.

Expansion Plans

Plans for expansion within the next five years were announced by 79 percent of the firms. Of those planning expansion, 58 percent said this expansion would take place both in San Francisco and elsewhere; 31 percent planned to expand only in San Francisco. The large proportion of those planning expansion outside San Francisco does not necessarily imply, however, that they intended to leave San Francisco altogether.

Employment

The average number of full-time employees of the firms that responded to the questionnaire was 192, receiving an average firm payroll of $1,017,322.* The seriousness of the possible out-migration of manufacturing concerns is evident in these numbers.

Market Orientation

On the average, less than half the total sales of the responding firms were to Bay Area customers. The following market pattern was revealed:

Geographic Area	Percent of Total Sales
San Francisco Bay Area	44.4
Other Parts of California	28.1
United States, without California	24.5
Foreign Countries	3.0
	100.0

*These figures exclude one unusually large firm in order to present a more realistic picture.

Less than 10 percent of the firms, however, reported that their sales were entirely outside the Bay Area.

Need for Industrial Promotion

Practically all the firms, 96.7 percent, thought that San Francisco should try to attract industry. The type of industry most mentioned was light manufacturing, but a great many felt that all types of industry should be attracted.

Disadvantages of Being Located in San Francisco

The survey questionnaire gave responding manufacturers an opportunity to identify their dissatisfactions with being located in San Francisco. Forty factors were listed on the questionnaire and firms participating in the survey checked those that they considered (1) disadvantages, (2) advantages, or (3) of little importance to being located here.

Many of the factors given an unfavorable rating are significant determinants of industrial location. It might be concluded, therefore, that the migration of industry will continue, especially since the alleged disadvantages have a monetary impact.

The principal factors considered as disadvantages are listed below in order of frequency of firms mentioning them. Neither the actual number of responses nor the industrial classification of the respondents was revealed in the results of the survey.

Factor	Percent of Firms Listing This a Disadvantage
Inventory Taxes	92.5
Property Taxes	83.8
Wages and Salaries	77.8
Labor Union Practices	75.7
*Land Available for Expansion	64.4
*Customer and Employee Parking Off-Site	57.6
Other Taxes	57.3
*Customer and Employee Parking On-Site	56.7
Labor Laws	47.4
Insurance Rates	47.4
*Efficiency of Building for Firm's Principal Activity	46.6
Availability of Skilled and Professional Labor	42.3
*Local Building Codes	39.4
Character of Labor Force	37.5
Management-Union Relations	36.1
*Condition of Adjacent Buildings	33.0

Since this survey was taken, the first two factors--taxes--have been thoroughly overhauled. City-wide tax assessment reform greatly changed the structure of the tax base in San Francisco, and personal property and real

*These factors are discussed in the text that follows this list.

property are now both assessed at the same proportion of market value. Taxes on industry in San Francisco are currently comparable with taxes in other Bay Area jurisdictions.

The factors identified with an asterisk (*) are aspects of the physical environment that the city may be able to alter by exercising its authority in the area of planning and development. The redevelopment of the Butchertown area near India Basin for an industrial park is an example of such action. Were the city to focus on solutions to all the physical location problems, there would still remain the alleged labor problems. In this last respect, it can only be noted that San Francisco is part of a regional labor market and that similar labor conditions and practices prevail over a wide area more or less to the same extent. It could very well be that the key to retaining industry in San Francisco is the correction of specific deficiencies in the physical environment.

Advantages of Being Located in San Francisco

Most of the factors that the survey respondents identified as advantages of a San Francisco location deal mainly with the adequacy of public utilities and services. In this respect, the city has played a successful role in satisfying some of the locational requirements of industry. It is particularly interesting, furthermore, that more than half the firms professed satisfaction with the condition of buildings occupied, and that only 27 percent felt that this factor constituted a disadvantage.

The chief factors mentioned as advantages are listed on the following page in order of frequency of firms citing them.

Factor	Percent of Firms Listing This an Advantage
Fire Protection Service	89.8
Power Service, Frequency Control	81.0
Climate Conditions	79.8
Natural Gas, Fuel, Oil, and Adequacy of Service	79.0
Security Enforcement (Police)	74.5
Water Pressure - Quality	67.3
Public Transportation	67.0
Proximity to Principal Markets	65.1
Ease of Access to Plant by Truck or Auto	62.6
Availability of Business Credit	60.6
Proximity to Principal Suppliers	58.1
Condition of Nearby Streets and Highways	54.4
Condition of Buildings Occupied	52.4
Employee Commuting Conditions	52.4
Community Relations	45.5
Water Disposal	45.5
Access to Railroads	43.6
Management-Union Relations	38.1
Local Recreational Amenities	37.1
Efficiency of Buildings for Firm's Principal Activity	36.6
Attitude of Community-Education and Welfare Facilities	34.8
Character of Labor Force	34.4
Availability of Skilled and Professional Labor	31.7
Availability of Unskilled Labor	30.6
Availability of Risk Capital	30.2
Relations with Local Government	30.2

Chapter

Factors of Little Importance in a San Francisco Location

Finally, there are those factors which have little to do with firms' opinions about whether or not San Francisco is a desirable place of operations. San Francisco, in other words, could excel or fail in these respects and it still would not seriously influence a decision to stay in the city or to move to another area. Although firms, in general, were not so quick to discount the importance of any of the factors bearing on industrial location, more than half the firms agreed that nine of the factors were of little importance. Most of these concerned community attributes or municipal functions.

The main factors deemed of little importance to being located in San Francisco are listed below.

Factor	Percent of Firms Listing This of Little Importance
Availability of Risk Capital	62.5
Local Zoning Codes	60.7
Local Recreational Amenities	59.8
Attitude of Community-Education-Welfare Facilities	59.6
Availability of Unskilled Labor	54.1
Relations with Local Government	52.1
Local Building Codes	51.0
Community Relations	50.5
Labor Turnover	50.4
Labor Laws	48.4
Condition of Adjacent Buildings	44.0
Access to Railroads	43.6
Availability of Business Credit	38.4
Other Taxes	37.1
Waste Disposal	33.7

1964 FIRM MIGRATION STUDY (Arthur D. Little, Inc.)

In 1964, Arthur D. Little, Inc., conducted a survey of a sample of industrial firms that migrated from San Francisco to surrounding Bay Area counties between 1953 and 1962.* Although fewer than three dozen firms responded to the survey, their experience had meaningful implications for San Francisco.

Market Orientation

Nearly all the respondents were oriented to a market that was primarily outside the Bay Area--i.e., other parts of California or out-of-state. The advantages of a central city location in a metropolitan distribution pattern were not relevant to these firms.

Age

The average age of the migrating firms was 38.9 years. This tended to refute the thesis that departing firms are apt to be those that have made good after a relatively short "incubation" period in cheap industrial space in the central city and are moving to permanent suburban sites. It suggests, instead, that the firms moved when their physical plant reached the end of its useful life.

Old Location

Nearly half the migrating firms were located in the South of Market District; about one-third were north of Market Street, east of Van Ness Avenue. The remaining firms moved from sites in other industrial districts of the city. The bulk of the departing industrial firms, in other words, left areas which because of their congestion, age, rising land values, and suitability for nonindustrial re-use, have become obsolescent locations for some industrial establishments.

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*Arthur D. Little, Inc., "Some Studies on the San Francisco Economic Environment", Technical Paper No. 5, San Francisco Community Renewal Program, 1965.

Plant Expansion

In general, the firms greatly enlarged their facilities at their new locations, thus manifesting a need for more spacious facilities than they possessed at their San Francisco location. One-third of the firms moved into industrial parks. Plant expansion occurred in the following pattern:

Type of Space	Increase in Space at New Location
Site Area	424 %
Building Floor Space	85
Office Space	86
Production Space	85
Storage Space	61

Employment Growth

Together with expanded facilities came increased employment at the new locations in the following general pattern:

Type of Employees	Increase in Employees at New Location
Unskilled	30 %
Skilled	40
Managerial and Professional	26

Reasons for Leaving

The survey identified many reasons for leaving San Francisco. The frequency with which these reasons were mentioned was not revealed; consequently, the following list of reasons does not indicate any order of importance.

Plans Processing

In general, the firms already enjoyed close relations with their customers, thus precluding a need for more specific facilities. When questioned at their Dyersburg location, Precision [illegible] their technical needs. Plans requiring customer [illegible]

Type of Space

Type of Space	Percentage in Area Facility
Area	[illegible]
Building Plans Space	[illegible]
Office Space	[illegible]
Processing Space	[illegible]
Storage Area	[illegible]

Equipment Owned

Companies were asked to indicate the [illegible] in the new locations. The following [illegible] patterns:

Item	Percentage Indicating Ownership
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

Location for Leasing

The survey investigated [illegible] leasing [illegible]. The [illegible] survey with which these results were [illegible] was not [illegible] summary, the following [illegible] [illegible] [illegible]

Lack of Space for Expansion of Facilities

Building Obsolescence

High Labor Costs

Need for Consolidating Separated Operations

Market Shifts

High Property Taxes (Real and Personal)

Desire for Airport Orientation

Inadequate Government Services

Noneconomic Desire for Suburban Location

Deteriorating Housing Supply

Industries Particularly Keyed to a San Francisco Location

Despite the departure of industry from San Francisco and the evidence of dissatisfaction with conditions in San Francisco, certain industries show an affinity for a central city location. They have remained strong in San Francisco during the years of industrial decline. They provide the bulk of industrial employment now and will likely continue as the mainstays of San Francisco's industrial resources. The 1964 Arthur D. Little study investigated the particular characteristics of these industries through numerous interviews.

1. Food and Beverage Industry (S.I.C. 20). Although the number of manufacturing firms operating in San Francisco declined 25 percent in the period 1953-1966 (see Table 22), this did not represent any significant migration of firms to adjacent Bay Area counties. There was, in fact, an 8 percent drop in the number of firms operating in the metropolitan area. San Francisco, with its many hotels, restaurants, and bars and its high residential density, is in itself a large and concentrated market for food and beverages. Food is

so much a part of the city's character, in fact, that San Francisco is easily in the major league of cities for eating and drinking. Higher operating costs in San Francisco tend to be offset by growing suburban costs, savings on deliveries to the San Francisco market, and the many conveniences available here. In addition, many of the major food and beverage manufacturers have considerable investment in their plant facilities and tend to be anchored to a San Francisco location.

2. Apparel Industry (S.I.C. 23). San Francisco remains the fashion center of Northern California. Women's and men's clothing stores in downtown San Francisco offer the broadest selection available and comprise an important segment of San Francisco's thriving downtown retail core.

Apparel makers, especially in fashion wear, prefer to be close to San Francisco's shopping district. Men's wear manufacturers are not tied so closely to a downtown location, although makers of various specialty lines and accessories desire to be close to Market Street.

Downtown garment manufacturers, including those in nearby Chinatown, typically occupy inexpensive ground floor and loft space in older buildings. Some firms, however, operate successfully in the industrial development northeast of the intersection of the James Lick and Southern Freeways, originally designated as "apparel city". These latter firms are typically large manufacturers and can afford the newer space. Even these firms, however, maintain downtown showrooms.

Both the existence of a great deal of older loft space and the availability of a large pool of workers who can be trained in the needle trades are important locational determinants of the apparel industry. Add to this the

dominant position that San Francisco's shopping district maintains in the metropolitan area, and it becomes clear that if there continues to be an apparel industry in Northern California,* it will be concentrated in San Francisco.

3. Printing and Publishing (S.I.C. 27). Between 1953 and 1966, employment in printing and publishing in San Francisco declined by only 155 jobs. The industry has shown remarkable over-all stability in this respect. The continuing growth of financial, administrative, and service segments of San Francisco's economy--evident in the current office building boom--generates increasingly greater printing needs.

Large commercial and industrial printers do not need a central city location. High rent or land costs often provide the impetus for migration to a suburban site. Rapid technological developments in printing, in addition, give firms an opportunity to consider a locational change along with the necessary technological changes.

The many small printers specializing in custom printing, quick service, and rapid delivery need to be located convenient to downtown. The competition in the industry, however, has made printers extremely sensitive to rises in overhead costs and they typically occupy cheap space in the older commercial and industrial buildings still abundant in San Francisco.

4. Other Manufacturers. For many manufacturers, especially in metals and machinery, the plethora of industrial maintenance and repair facilities available in San Francisco is a major reason for staying here. This is important particularly for smaller firms; large firms often perform many of these services for themselves and are, therefore, more able to move.

*Los Angeles has for years maintained the lead in California's apparel industry, with approximately four times the number of employees that S.F. has.

Still other firms find a San Francisco location the best compromise from the standpoint of hiring and keeping their help. San Francisco is served by well established and dependable public transportation. It also represents the best compromise location for commuters who typically live all over the Bay Area.

5. Wholesale Trade (S.I.C. 50). Between 1953 and 1966, the number of wholesale establishments in San Francisco dropped by 6 percent (see Table 22). Certain branches of wholesale trade, however, have shown a remarkable persistence and continue to prosper in the city. Table 7 lists six categories of wholesale trade in which employment increased during that period:

Dry Goods and Apparel
Groceries and Related Products
Electrical Goods
Machinery, Equipment, and Supplies
Metals and Minerals, except Petroleum
Administrative and Auxiliary

The downtown office boom, the acknowledged popularity of the city as an entertainment center, the continued strength of much of the city's manufacturing, and the prestige of a San Francisco location account at least partially for the observed stability within the area of wholesale trade. Then, too, San Francisco still is the hub for the most efficient distribution of goods throughout the Bay Area counties.

Many wholesalers desire to be downtown. In the case of wholesale office furnishings, the market is downtown; for apparel wholesalers some important customers as well as suppliers are in or near downtown. Distributors of

paper and printing equipment like to be near the printing establishments. Much of the wholesale food and beverages industry is still in and around the central business district. The produce market was relocated from downtown to its present site in the southeast part of the city, but it was harmed at that time by a decision of a large segment to move outside the city altogether.

1963 SOUTH OF MARKET COMMERCIAL AND INDUSTRIAL SURVEY (San Francisco Redevelopment Agency)

As pointed out earlier in the LOCATION section, the South of Market District contains a large proportion of San Francisco's Industry (see Tables 8 through 14). The inauguration of the Yerba Buena Center Redevelopment Project in a seriously blighted part of the district raised the problem of dislocating industrial establishments. In 1963 the Redevelopment Agency conducted a survey of 723 firms within the boundaries of the redevelopment project. Sixty percent of the firms fell into the broad definition of industry. Although industrial firms would be dislocated by the redevelopment and consequently might decide to leave the city altogether, more than 90 percent of all industrial establishments surveyed wanted to remain in the area. Table 23, showing the types and numbers of industrial firms surveyed, offers some explanation for this disinclination to leave the area: nearly half the firms belonged to industries that appear to have a preference for a central city--especially downtown--location.

There is some doubt, however, about their need to be in or near downtown. Except for the fact that many firms' business was largely downtown, the survey found that the availability of suitable space was the main reason for being

TABLE 23. INDUSTRIAL ESTABLISHMENTS IN THE YERBA BUENA CENTER REDEVELOPMENT PROJECT AREA - 1963

S.I.C.	Activity	Number of Establishments
15-17	Contract Construction	16
...	Manufacturing	123
20	Food and Kindred Products	7
22-23	Textiles and Apparel	24
27	Printing and Publishing	45
34	Fabricated Metal Products	6
35	Nonelectrical Machinery	7
...	Other Manufacturing	34
...	Transportation, Communication and Other Public Utilities	13
42	Trucking and Warehousing	5
...	Other Transportation, Communication and Utilities	8
50	Wholesaling -- with stock	121
50	Wholesaling -- without stock	26
	TOTAL	435

Source: San Francisco Redevelopment Agency, Commercial and Industrial Survey: South of Market, July, 1963.

located in the area. Implicit in this response was the possibility that many firms might choose to leave the area--or the city--if acceptable space were available elsewhere.

Survey interviews attempted to get at dissatisfactions with being located in this part of the South of Market District. Objections to the area dealt mainly with: (1) the skid-row character of the area; (2) off-street parking problems; and (3) the condition and layout of the space occupied.

1967 INDUSTRIAL SURVEY (Greater San Francisco Chamber of Commerce)

The 1967 survey was conducted by means of a questionnaire mailed to approximately 2,500 firms mostly in manufacturing and wholesaling. This was a multi-purpose survey designed to find out: (1) industrialists' satisfaction and dissatisfaction with their locations; (2) expansion and relocation plans; (3) manpower needs; and (4) many other characteristics of industrial firms' operations. Overall response to the survey was nearly 20 percent.

Satisfaction with Present Location

Industrial firms were asked to evaluate their location in terms of 14 factors relating to accessibility and to utilities and municipal services. Respondents rated these factors as: (1) disadvantages; (2) advantages; and (3) of little importance in their location. Unlike the 1964 survey by the Chamber of Commerce, this inquiry into industrialists' satisfactions with their present locations related exclusively to accessibility and services to the site and not to conditions such as land for expansion, building condition, climate, taxes, wages, and the like (see Table 24).

TABLE 24. INDUSTRIAL FIRMS' EVALUATION OF THEIR SITES IN SAN FRANCISCO IN TERMS OF 14 FACTORS - 1967

Factor	Disadvantage		Advantage		Of Little Importance		No Response*	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
Employee Commuting Conditions	73	22.5	157	48.3	95	29.2	0	0.0
Ease of Access by Truck or Auto	93	28.6	164	50.4	56	17.2	12	3.7
Conditions of Nearby Streets & Highways	77	23.7	144	44.3	85	26.2	19	5.8
Public Transportation	37	11.4	159	48.9	106	32.6	23	7.1
Waste Disposal	41	12.6	104	32.0	152	46.8	28	8.6
Power Service & Frequency Control	6	1.8	153	47.1	135	41.5	31	9.5
Natural Gas, Fuel-oil Service	4	1.2	129	39.7	161	49.5	31	9.5
Security Enforcement (police)	39	12.0	163	50.2	91	28.0	32	9.8
Water Pressure & Quality	12	3.7	128	39.4	153	47.1	32	9.8
Local Zoning Codes	36	11.1	90	27.7	166	51.1	33	10.2
Local Building Codes	37	11.4	84	25.8	170	52.3	34	10.5
Fire Protection Service	6	1.8	193	59.4	92	28.3	34	10.5
Access to Airports	8	2.5	77	23.7	200	61.5	40	12.3
Access to Railroads	27	8.3	73	22.5	187	57.5	38	11.7

* The total number of firms responding was 325. Some firms did not consider all the factors.

Source: Greater San Francisco Chamber of Commerce, Industrial Survey of San Francisco, April, 1968

On the whole, the respondents felt either satisfaction with their locations or indifference. No more than 29 percent of those answering this question felt that any one of the 14 factors was a disadvantage or problem. The three factors most mentioned as disadvantages of the location were, in order of importance: (1) ease of access by truck or auto; (2) conditions of nearby streets and highways; and (3) employee commuting conditions.

More than half the responding firms cited as advantages of their site: (1) fire protection service; (2) ease of access by truck or auto; and (3) security enforcement (police). Between 40 and 50 percent of the firms cited as advantages: (1) public transportation; (2) employee commuting conditions; (3) power service and frequency control; and (4) conditions of nearby streets and highways.

In general, firms expressing satisfaction with their site in terms of accessibility and public service far outweighed those expressing dissatisfaction; and there was clear agreement on one point: only 17 percent of the firms thought that ease of access by truck or auto was of little importance. Fewer than one-third of the answering firms, furthermore, felt that the following factors were of little importance: (1) public transportation; (2) employee commuting conditions; (3) fire protection service; (4) security enforcement; and (5) condition of nearby streets and highways.

These five factors, together with ease of truck or auto access, were obviously the most critical of the 14 factors influencing industrialists' satisfaction with their site. Because they are all either city-provided services or the result of other public action (such as freeway construction),

it is vital that the quality of these services and facilities be maintained or improved, where necessary. Continued satisfaction with the site plays an important part in industry's decision to remain in the city.

Relocation Plans

Firms surveyed were asked if they had definite plans to expand their facilities. Of the 401 firms responding to this question, 127, or 32 percent, replied that they did have such plans. With this potential for growth, a big question is where this growth will take place. With land for expansion often either unavailable or expensive, as the Chamber of Commerce's 1964 survey corroborated, there is the probability that many of these plants would have to move. This, in turn, brings up the prospect of further migration of San Francisco industries to locations outside the city.

Firms were then asked if they were planning for any reason to leave their site and where the future site would be. Of the 477 firms that revealed their plans, 306, or 64 percent, planned to stay at their site and 17 percent planned to relocate somewhere in San Francisco. The rest, 19 percent, expressed their intentions to relocate elsewhere.

There was no correlation between age of an industrial building and plans of the occupant to leave San Francisco. Of the 247 respondents that occupied pre-1930 buildings, 196, or 80 percent, planned either to stay at their present site or relocate elsewhere within the city; of the 171 respondents in buildings constructed in 1930 or later, 135, or 79 percent, planned to remain in San Francisco.

The results indicated that at least some firms in practically every major type of manufacturing activity in San Francisco intended to leave their present site, but their destination, by industry was not revealed. Although many wholesale firms participated in the survey, it was not made clear whether or not any of these intended to leave their existing location. Any decision by a San Francisco firm to leave the city would generally involve a set of circumstances quite peculiar to that firm. Such decisions might be complicated or very simple. The 1967 industrial survey touched on many possible reasons for migrating from San Francisco. In addition to dissatisfaction with the site, which has already been discussed, the survey identified other possible reasons among the responding firms:

38 percent of the work force lived outside San Francisco;

80 percent of all sales originated outside San Francisco;

70 firms indicated they would like to relocate in an industrial park;

An unknown number of firms mentioned the high cost of doing business in San Francisco;

An unknown number of firms claimed that trade union activities in San Francisco pointed up the attractiveness of nonunionized areas.

The survey results also revealed that San Francisco industry is faced with a serious shortage of managerial, clerical, sales, and skilled blue-collar workers. Because there is no evidence that this is a problem peculiar to San Francisco, it would be erroneous to cite this as a reason for leaving the city. It is true that other counties have large pools of such workers, but the competition for qualified people is already a metropolitan phenomenon.

VACANT LAND AND FLOOR SPACE

Vacant Land

The land use survey conducted by the Department of City Planning between 1961 and 1964 revealed an abundance of vacant industrial land in San Francisco. In those areas of the city zoned predominantly for industrial use (Map 3), there were 453 acres of vacant, dry land.* Precise acreages are given in Table 25. Map 4 shows the location of all vacant, dry land in San Francisco.

The industrial areas in the southeastern part of the city--identified on Map 3 as Z.1 through Z.5--had 306 acres, or two-thirds of the total amount of vacant land in the industrial areas. The rest of the vacant land was concentrated mainly in areas Y.2 and Y.3--the Channel and Central Basin areas.

Since the completion of the 1961-64 land use survey, much of this vacant land has been developed. A large motor freight terminal and a discount department store have taken more than half the vacant land in the Channel area. In the Central Basin area, further filling of tidelands augmented the amount of available industrial land, but most of the land has now been developed for the 68-acre Army Street Terminal (San Francisco Port Authority) and for one-story wholesale distribution and light manufacturing buildings. A significant vacant area still exists in the center of the Central Basin area, west of Third Street. Flat, served by rail, with convenient access to the new Southern-Embarcadero Freeway, the land is mostly zoned M-2 for heavy industrial development.

Much of the land in Z.1, the Islais Creek area, that was formerly vacant has since been improved with warehouses. There remains throughout this area, however, a great deal of underused land--salvage yards and areas for occasional outdoor storage.

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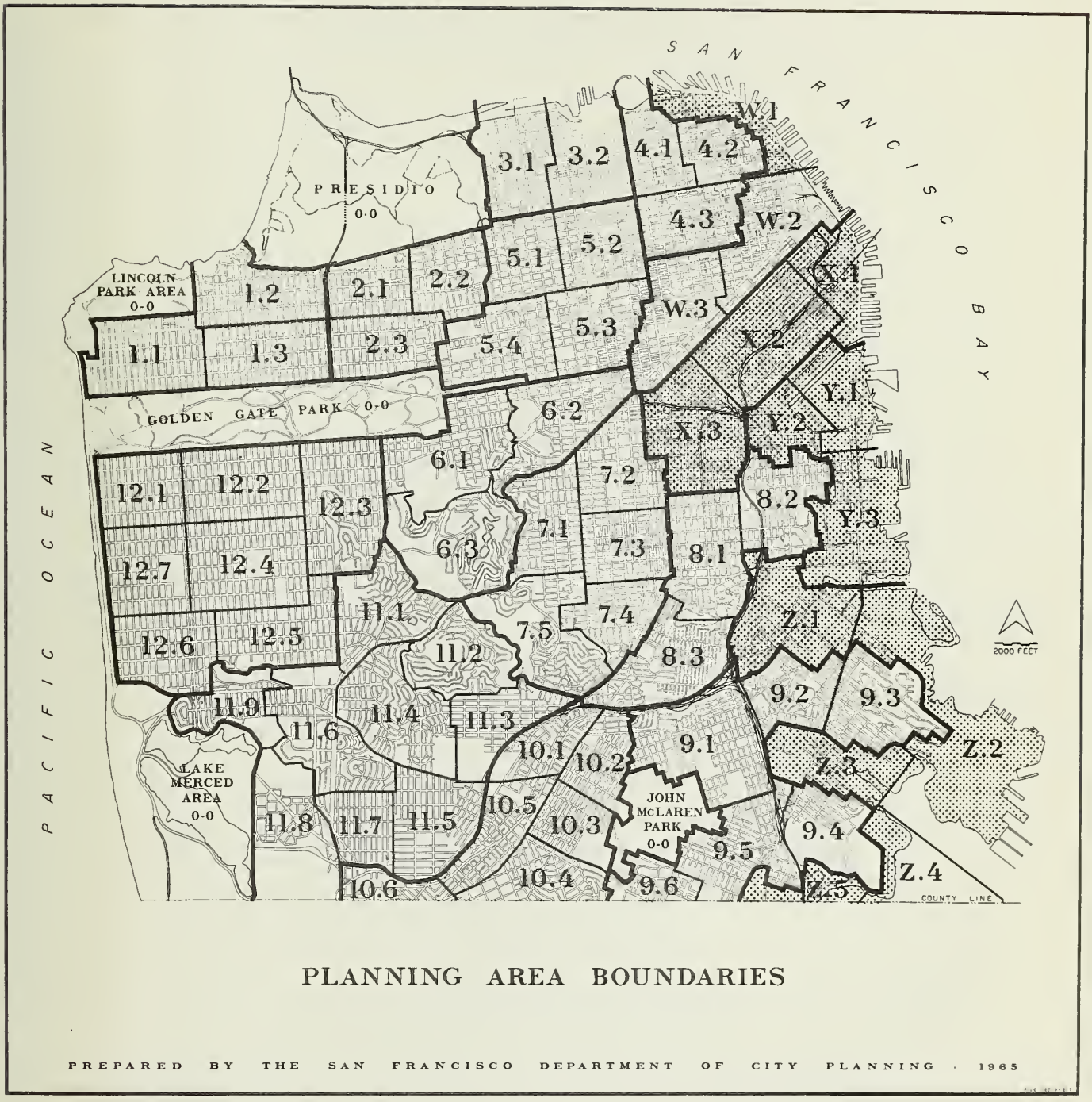
*This did not include other unimproved land devoted to open-air industrial uses.

Vacant Land

The land use survey conducted by the Department of City Planning between 1961 and 1965 revealed an equal mix of vacant industrial land in the Brooklyn-Queens area and the city zones reserved for industrial use (Map 7). There were 421 acres of vacant, dry land. Location acreages are given in Table 27. See 4 zones the location of all vacant, dry land in the city.

The geographical areas in the immediate past of the city-administration on Map 2 as well through Richmond County, on the Staten Island ferry, and the Bronx-Whitestone Bridge, are the areas of the largest vacant land in the city. The rest of the vacant land is scattered mainly in areas [illegible] and Central Manhattan.

Since the completion of the [illegible] land use survey, [illegible] vacant land has been developed. A large power [illegible] and a [illegible] department store have taken over [illegible] of the vacant land in the Bronx. In the General Motors [illegible] of Islands [illegible] the owners of [illegible] the [illegible] land. But much of the [illegible] developed for the [illegible] Motor Freight Terminal [illegible] [illegible] [illegible]



PLANNING AREA BOUNDARIES

PREPARED BY THE SAN FRANCISCO DEPARTMENT OF CITY PLANNING · 1965

AREAS OF SAN FRANCISCO ZONED PREDOMINANTLY FOR INDUSTRY-1964

Map 3

VACANT LAND

(EXCLUDING REDEVELOPMENT AREAS, TIDELANDS AND BEACHES)

SOURCE: 1961 - 64 LAND USE SURVEY

PREPARED BY THE SAN FRANCISCO DEPARTMENT OF CITY PLANNING · 1964

Map 4

TABLE 25. VACANT (DRY) LAND IN AREAS PREDOMINANTLY ZONED FOR INDUSTRY - 1961-1964

Area*		Acres
W.1	North Embarcadero	2.04
X.1	Rincon Hill	2.89
X.2	South of Market	1.49
X.3	Division	13.41
Y.1	China Basin	5.32
Y.2	Channel	23.99
Y.3	Central Basin	97.26
Z.1	Islais Creek	38.44
Z.2	India Basin	109.92
Z.3	South Basin	65.95
Z.4	Double Rock	56.11
Z.5	Candlestick	35.69
	TOTAL	452.51

*These areas are shown on Map 3.

Source: San Francisco Department of City Planning, 1961-64 Land Use Survey.

In the India Basin area, Z.2, the 110 acres of vacant land has been greatly enlarged by extensive tideland filling. Most of the vacant land will eventually either be occupied by the Port Authority's proposed containership terminal or taken for the Hunters Point Freeway and the India Basin Bay Crossing. Part of the remaining vacant area is included in the Butchertown industrial redevelopment project, which will provide approximately 75 acres for industrial development. The other sizable area lies outside the north gate of the Hunters Point Naval Shipyard and fronts on India Basin. The precise amount of area that will be available there will depend on how much is needed for the India Basin Crossing. It is filled land, zoned M-2.

The greatest potential for development of vacant industrial land is in Z.3 and Z.4, the South Basin and Double Rock areas. The 1961-64 land use survey found 122 acres of vacant, dry land there. Although there has been some new industrial development west of Third Street, the bulk of the vacant land east of Third Street is still available. There is, in addition, a great amount of unimproved land used for salvage yards, contractors yards, and lumber storage. Together with probably additional filling of tidelands, recommended by the Department of City Planning in the current planning study of the South Bayshore District, the development potential is considerable.

Not all the vacant land or land proposed to be filled should necessarily be devoted to industry. The South Bayshore District planning study recognizes the need for waterfront recreational development on a portion of the filled land zoned for industry; and some vacant industrial land might better be devoted to new residences. Some of the unimproved streets, on the other hand, that run between vacant blocks might well be consolidated with the adjoining

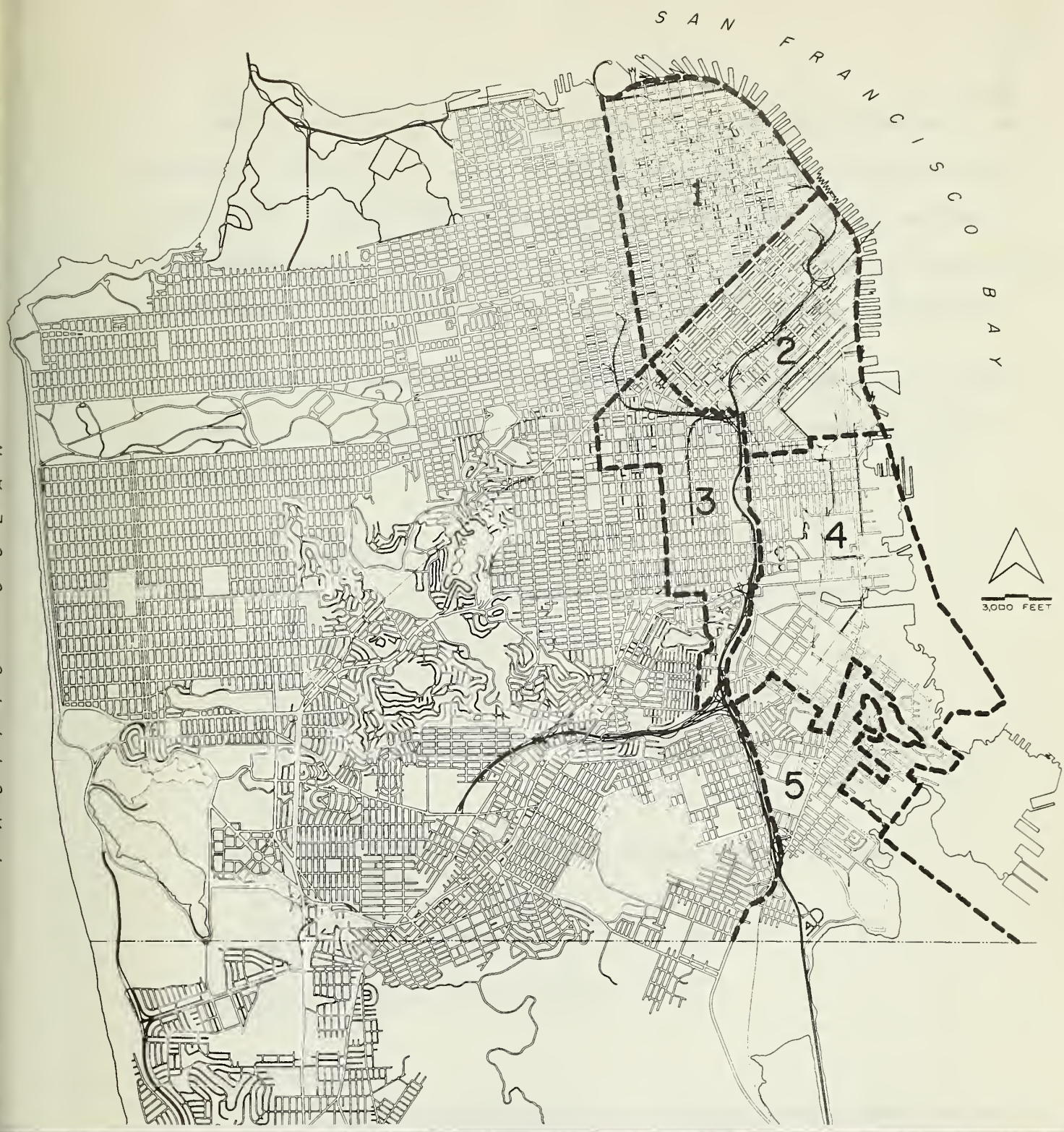
blocks for industrial sites. All factors considered, there may be as much as 200 acres for industrial growth in the South Basin and Double Rock areas in the coming years. Almost all the presently available land is reclaimed tidelands and presents a problem for heavy buildings. Land in the South Basin area is zoned M-1 and in Double Rock mostly M-2. Light industrial uses, however, would be the most logical type of industrial development in both areas.

In Z.5, the Candlestick area, the 36 acres found to be vacant lie on both sides of the principal freeway entrance to San Francisco from the south. On the east side there is presently no industrial development, and the South Bayshore District planning study recommends residential, commercial, and recreational use of the vacant industrial area. On the west side, the land, zoned M-1 and M-2, should be carefully developed in keeping with its position as gateway to the city.

Vacant Floor Space

The 1964 survey of commercial and industrial properties, done as part of the Community Renewal Program, found 3,912,700 square feet of vacant industrial floor space. This was six percent of the total 65,014,500 square feet of floor space surveyed.

Map 5 shows the distribution of vacant industrial space by districts in the eastern third of San Francisco. The South of Market District contained 50 percent of this space; and although the North of Market District had another 29 percent of the vacant space, 92 percent of this was within a few blocks of the waterfront.



PERCENTAGE DISTRIBUTION OF VACANT INDUSTRIAL FLOOR SPACE, BY DISTRICT-1964

Total vacant industrial floor space: 3,912,700 square feet

1	North of Market	29%
2	South of Market	50%
3	Mission	7%
4	Central	8%
5	Southeast	5%

Map 5

Source: A.D. Little, Inc., "San Francisco Community Renewal Program, Technical Paper Number 5", 1965

The 6 percent industrial vacancy rate is not unusual, according to the Arthur D. Little study.* Even the existence of half the vacant floor space in the South of Market District is not abnormally high. As the section on LOCATION points out, nearly half the total floor space devoted to the selected major industrial activities in San Francisco was located in that district.

There is no inventory of current vacant industrial floor space in San Francisco, but a few examples of vacant buildings may provide an idea of available space:

1. Warehouse

   Corner of Third and Bryant Streets (South of Market)
   152,000 Square Feet
   5-Story, Concrete Construction
   Heat in Offices Only
   No Off-Street Parking
   Rail Spur
   Truck Loading from Public Alley
   M-1 Zoning

2. Warehouse

   Division, Kansas, Alameda, and Vermont Streets (Channel)
   300,000 Square Feet
   4-Story, Brick Construction
   Warehouse Space Unheated
   No Off-Street Parking
   Rail Spur
   Truck Loading from the Streets
   M-2 Zoning

3. Warehouse

   Third Street, between Brannan and Townsend Streets (South of Market)
   44,000 Square Feet (formerly three times as large)
   4-Story, Brick Construction (1908)
   60-Car Parking Area
   M-1 Zoning
   Undergoing thorough interior reconstruction for eventual use as offices and showrooms.

*San Francisco Community Renewal Program, Technical Paper No. 5

4. Fish Cannery

Rankin Street at Custer (Islais Creek)
82,500 Square Feet
2-Story, Concrete Construction
Limited Off-Street Parking
Off-Street Truck Loading
Frontage on Ship Channel
M-2 Zoning
Machinery, Refrigeration, etc., still in the building

5. Factory (still operating; to be vacated)

Alabama Street at Mariposa (Central Basin)
110,000 Square Feet
3-Story, Brick-faced Fireproof Construction; 1-Story, Brick Construction
Limited Off-Street Parking
Rail Spur
Off-Street Truck Loading
M-1 Zoning

Conclusions

The supply of vacant land in San Francisco's industrial districts is slowly dwindling. Nevertheless, there remains vacant land for new industrial development in all the industrial areas of San Francisco. The greatest resource for new industrial sites is in the southeastern part of the city, north and east of Candlestick Park. The full potential of this area, however, could be lost by a combination of several unfavorable circumstances:

Unsuitable Block Layout

Absence of Street Improvements and Utilized

Unscientific Filling of the Land

Use of Scattered Parcels for Unsightly, Open Storage

Drastic measures are necessary to assure maximum use of the area. Redevelopment is the most feasible way of assuring this, particularly in the area north of Candlestick Park.

San Francisco has many examples of successful, imaginative conversions of obsolescent factory and warehouse buildings for retail and office use. Yet, for most obsolescent structures that are not near the Central Business District or in a prestigious location on the waterfront, the potential for conversion to a nonindustrial use is limited. Noticeably lacking are remodelings for industrial re-use. Instead, factories tend to sit idle with perhaps the office space rented; and old multi-story warehouses remain vacant except for incidental use of the ground floor.

IMPLICATIONS

Changing industrial patterns in San Francisco and in the metropolitan areas are having a significant influence on San Francisco's industrial workers and on the physical development of the city. The implications of these changes are important, and an understanding of them will aid in formulating policies for preserving and strengthening San Francisco's industrial base.

1. Industry is likely to continue diminishing as a source of employment in San Francisco in both absolute and relative terms. With the growth of industry in the surrounding counties, furthermore, San Francisco can be expected to play less and less of a role in the industrial production and employment of the region. Nevertheless, industry is and will remain of major economic importance to San Francisco.

2. Employment has not declined in all fields of industry. A major industrial employment category that has remained stable in San Francisco is contract construction. Employment in contract construction is likely to remain strong as the downtown construction of offices and hotels continues and as older parts of the city undergo rebuilding.

3. Shrinking opportunities for blue-collar employment, except in specific industrial fields and in certain service occupations that are not classified as "industry", pose a problem for those lacking the qualifications for other types of work. Many industrial workers have already met this problem by finding employment in the expanding industrial areas outside San Francisco. For many, however, the answer may be in retraining for non-blue-collar jobs in San Francisco's growing

[illegible]

fields of services, finance, and government. Given declining industrial opportunities, vocational training in the public schools can be more relevant by concentrating on occupations in the expanding sectors of the city's economy.

4. Attempts to preserve the city's existing industrial base and to attract new industry would seem to require a greater effort and expense than now being devoted to these activities.

5. The continuing loss of industrial establishments and employment in San Francisco calls for a serious look at the need for and probable success of a major effort in industrial promotion. Except in some specific industries such as electrical machinery manufacturing, printing and publishing, wholesale trade, and trucking, the trends indicate that attracting new industry to San Francisco may be a difficult task. The whole field of retaining existing industry and attracting new industry involves a wide range of complex and continuous operations. In older urban centers throughout the country, such a program is often carried out by an industrial development corporation that has powers to:

   Raise funds by selling bonds, accepting grants, or other means;

   Buy and assemble land for industrial use;

   Finance the construction, rehabilitation or conversion of industrial buildings;

   Generally conduct a program to attract and retain industy.

6. Deterioration and the re-use of older industrial structures and sites for nonindustrial activities is gradually reducing the amount of inexpensive close-in industrial space. This may adversely affect the vitality of the typically close-in industries such as printing and publishing,

apparel manufacturing, and wholesale trade. This could, in turn, have a major effect on industry elsewhere in the city.

7. The city has been performing valuable functions related to a sound industrial climate. The general satisfaction that industry feels toward the present level of public services and utilities serving industrial areas is already established. It is necessary that continued good service be provided in terms of police and fire protection, street and highway access, bus service, and public utilities.

8. Other efforts in the direction of industrial promotion are the completed and planned improvements in the facilities of the port. An industrial activity in itself, the port owes at least part of its vitality to the continued strength of other industry in San Francisco. The loss of industrial firms that use the port harms the port. For its own survival and for the continued strength of industry in San Francisco, the port has no alternative, but to modernize and aggressively pursue opportunities for increased business. Every indication is that the port can and should remain a major industrial foundation of the city, and with it, a major source of employment.

9. The problems of retaining industry in San Francisco apply with particular force to the South of Market District. It is one of the city's major industrial areas and what happens to industry there is vital to the city. Both private development pressures and current public policies indicate a further and perhaps accelerated erosion of industrial firms and

employment from the South of Market District. Possible alternatives lie in the development of new industry (a limited potential), more intensive use of remaining industrial space South of Market Street, multiple use of some lands and structures to include industries, or public measures to retain and enhance industry South of Market Street. More than any other single factor may be the economic pressures for alternative uses in a highly competitive land market that will cause a decrease in San Francisco's industrial base.

10. In the future, individual industrial establishments are going to need more land for plant expansion and off-street parking. Absorption of existing vacant industrial land does not necessarily imply net industrial growth. It is likely that the amount of land devoted to industry will continue to increase even though the number of establishments and employment might not.

11. The existence of vacant industrial land in San Francisco does not necessarily mean that there is no market for it. It could be that the land has to be made more attractive in terms of price and usability. The same implication may be true of vacant industrial structures that could be profitably re-used if imaginatively refurbished for particular industrial needs. The accomplishment of these objectives may require the deliberate action of the city or some body empowered specifically to foster industrial development.

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